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ABSTRACT

After surveying the vocational rehabilitation (VR) needs of disabled migratory and seasonal farmworkers in the U.S., a national plan to meet those needs was developed, in cooperation with designated state agencies. A random cluster sample of farmworkers was interviewed to determine service needs. Additional planning data were gathered by interviews with rehabilitation counselors and administrators, and with the staff of other agencies and organizations. Rehabilitation agencies were represented on the study's advisory committee. It was found that an estimated 293,000 farmworkers were eligible for VR services. Although their disability rate was three times that of the general U.S. population, farmworkers were less likely to receive VR services. Those receiving VR services were less likely to be successfully rehabilitated. This report presents information pertaining to: background characteristics of migratory and seasonal farmworkers, incidence of disabilities among farmworkers, types and severity of disability, rehabilitation services for disabled migrants, racial/ethnic classification of farmworkers, income and household size, seasonal migration, resettlement for vocational purposes, education, language ability and preference, awareness of VR and other service programs, factors affecting service delivery, agency priorities and incentives for counselors, current VR programs for farmworkers, and barriers to successful rehabilitation. The proposed service delivery system is described. (NQ)

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HANDICAPPED MIGRANT FARM WORKERS

Characteristics of Disabled Migratory and Seasonal Agricultural Workers and their Families, Impact of the State/Federal Vocational Rehabilitation Program, and Strategies for Expanding Services

by

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* Bound separately and available at cost on request.

FINDINGS AND CONCLUSIONS IN BRIEF

Summary

Purpose-- This study surveyed the vocational rehabilitation needs of the migratory and seasonal farm worker population in the U.S. A national plan to meet those needs was developed, in co-operation with designated state agencies.

Methodology-- Service needs were determined by interviewing a random cluster sample of the U.S. seasonal agricultural worker population. Additional planning information was gathered by interviews with rehabilitation counselors and administrators, and from staff of other agencies and organizations. Rehabilitation agencies were represented on this study's advisory committee.

Findings-- An estimated 293,000 farm workers* are eligible for vocational rehabilitation (VR) services. Farm workers' disability rate is three times that of the general U.S. population. Nevertheless, farm workers are less likely than the rest of the population to receive VR services. Farm workers receiving VR services are less likely to be successfully rehabilitated.

Conclusions-- Relatively high unmet needs among farm workers are attributable to "service delivery barriers" related to special characteristics of that population. The barriers could be overcome by state VR agencies if they augmented their present service delivery systems with a system for farm workers, as described herein. Adoption of the supplementary system could be encouraged by a federally co-ordinated and funded program of grants, technical assistance and VR program adjustments. The next 13 pages briefly describe these findings and conclusions.

Incidence of Disabilities Among Farm Workers

A small but random cluster sample shows that 44.5% of the nation's migratory and seasonal agricultural worker households have one or more disabled members ($\pm$ 6.7%, @ >.95 level of confidence).

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* Except where otherwise noted, the term "farm worker" is used to mean a migratory or seasonal agricultural worker, or a member of such a worker's household.

31.3% of the heads of farm worker households are, in their own judgment, limited in the amount or kind of work they can do because of a physical, mental or emotional problem (± 6.3%). The comparable disability rate among the U.S. population as a whole is 10.6%.

Farm worker households having one or more disabled members number 390,094 (± 109,780 due to conflicting population data). At least 137,313 of those disabled would meet VR eligibility criteria for employment potential. Inclusion of disabled housewives would bring the figure to 292,571.

Since none in the sample had received VR services, substantially less than one percent of all eligible farm workers are estimated to have received VR. The actual number receiving services is unknown, because VR case records generally do not identify farm workers as such.

Barriers to Successful Rehabilitation

Mobility, poverty, culture, language and other special characteristics of migratory and seasonal agricultural workers, in the context of U.S. society, tend to isolate disabled farm workers from VR services. Those farm workers who do become VR clients tend to benefit less from VR services, again due to farm workers' special characteristics.

Successful closure of farm worker VR cases can be variously defined. Most counsellors with farm worker clients define successful closure in terms of "status 26" requirements, in which the client completes a training or treatment plan and is placed in satisfactory employment lasting beyond some specified time. Some counsellors report that farm worker client cases are less likely to achieve status 26 closures, due to special client characteristics such as mobility, language or apparent lack of interest by the client. Other counsellors report that attrition during the placement and follow-up period is higher with farm workers, so credit is lost for cases that would have qualified for status 26. Still other counsellors report no significant differences in success rates between farm workers and other clients.

Use of the status 26 criterion may mask lower degrees of success with farm workers than with other VR clientele. Counsellors report that most farm worker clients achieving status 26 have been provided with

medical treatment or restoration services, and then returned to farm work without receiving vocational training or related services. The client reportedly accedes easily to plans to return to farm work. However, farm workers sampled by IRA would have preferred to pursue a different vocation.

Clients who actually prefer to return to farm work are usually unaware of labor market trends in agriculture. Recent projections suggest continued shrinkage of the seasonal labor market due to crop mechanization and other labor displacing technology. If a counsellor doesn't explore alternative training and vocational plans for the disabled farm worker during case planning, he might be doing his client a disservice, in spite of the client's stated preference for farm work. Development of vocational alternatives is often made very difficult by farm workers' needs for basic education and other long-term training. But both counsellor and client often fail to realize that return to farm work will mean increasing unemployment, underemployment, and shrinking individual earnings.

Successful rehabilitation is a matter of degree, as opposed to the "all or nothing" character of status 26. If the status 26 closure rate for farm workers were known, it might exaggerate the effectiveness of VR services provided such clients, relative to other VR clientele. In any case, closure data on farm workers cannot be derived from available case records.

Special characteristics of the farm worker population, leading to disparities in VR service delivery and effectiveness, are summarized in terms of ten "barriers" to successful rehabilitation.

1. Inadequate health and medical services for migratory and seasonal agricultural workers. Farm workers' limited access to and use of medical and health services tends to reduce the number of referrals by physicians to VR. Some counsellors feel that physicians also tend to co-operate less with VR when evaluating or treating a farm worker VR client.

2. Lack of other agency services for the target population. Although farm workers are eligible for a number of service programs, they are less likely to make contact or receive services from agencies that normally refer to VR.

3. Lack of interagency referrals between VR and organizations providing services to the target population. Programs serving primarily farm workers have little or no contact with VR, even though referral, training, treatment or placement agreements could be developed. Examples found were PHS Migrant Health projects, EOA-III-B grantees, DOL "Last Yellow Bus" MDTA contractors, DOL "SER" Jobs for Progress offices, DOL-OIC projects serving migrants, community organizations, unions, and others.*

4. Lack of financial resources among the target population to absorb rehabilitation costs. The average annual earnings of the households with disabled members in IRA's sample was $2,958, yielding a per capita earned income of $518. The average total annual household income was $3,767, the difference being provided by income transfer payments programs such as AFDC, and miscellaneous sources. (In-kind employment benefits, and voucher subsidy programs such as food stamps, are excluded.) Participation of a family member in a plan typically imposes special costs on the farm worker household, principally in the form of lost wages by the client and others who provide the client's transportation or forgo migration during rehabilitation. Temporary loss of the client's services in the home (e.g., child care) are among other such costs. Ignoring such costs during case planning may contribute to farm worker clients' high attrition rate.

5. Language and cultural differences between the target population and VR staff. Insufficient understanding between counsellors and farm worker clientele is suggested by high attrition, and by discrepancies between IRA survey findings and counsellors' impressions of clients. Most counsellors of farm workers are unable to speak those clients' native language. 80% of the farm workers interviewed by IRA spoke Spanish, and 40% spoke almost no English. Counsellors' lack of information on farm workers' social, cultural, employment and financial background appears to impede successful rehabilitation.

6. Shortage of appropriate training programs for target clientele. Formal education of farm workers sampled averaged 3.4 years. 2% had high school diplomas. Appropriate training resources were lacking in communities

*DOL (U.S. Dept. of Labor) programs for farm workers have since been reorganized, and some have been discontinued.

with local concentrations of farm workers. Needed resources include bilingual adult basic education programs, other bilingual-bicultural instruction, programs teaching English as a second language, and pre-vocational instruction concerning conventional work habits and employment norms in non-agricultural industry and commerce.

7. Geographic isolation and mobility of the target population. The farm worker population is frequently distributed along rural farm roads, or concentrated in rural colonies, or residing in temporary field camps. Disabled farm workers frequently do not have access to personal or public transportation. The immediate financial needs described above, along with high unemployment rates at home base areas (estimated at 16%), encourage seasonal migration in search of work. Migration is likely to occur even at the expense of service delivery continuity and associated long-range benefits.

8. Normal waits and delays in the rehabilitation process. Cases which last into periods of seasonal employment are more likely to be lost, particularly if training or treatment is not actually in progress when the season starts. This is especially true of households that must migrate in order to find seasonal employment.

9. Administrative disincentives for maximum rehabilitation of target clientele. Counsellors generally are quite aware of federal and state agency interest in recording the most rehabilitations per unit of agency expenditure. Counsellors strive to maintain favorable status 26 closure rates, and to limit the average direct cost expenditure per case by their agency. The impact of those incentives on recruitment of disabled farm worker clientele, and on eligibility determinations for farm workers, is not clear. Some counsellors do believe farm workers to be more difficult to rehabilitate in terms of status 26 requirements. Local social attitudes and interagency relationships also appear to discourage or prevent some counsellors from serving disabled farm workers.

Case planning for eligible farm workers is clearly affected by counsellors' cost consciousness. Counsellors usually perceive the only feasible vocational objective to be return to farm work. More ambitious training plans are often felt to be prohibitively costly, given farm workers' limited formal education and other special characteristics. Counsellors' decisions to rehabilitate clients by returning them to the fields are

sometimes encouraged by other factors, such as misinformation about the farm labor market, misunderstanding of clients' aspirations, lack of suitable training resources, local social attitudes, and difficulties in counselling farm workers.

10. Limits of resources offered by the behavioral sciences and psychotherapeutic arts. Psychometric diagnostic instruments frequently are not valid for vocational evaluation of farm workers. Also, 12% of the disabled in IRA's sample reported emotional or related problems; farm workers' culture and language make treatment difficult.

Policy Considerations

Target Population Priority-- Present VR policy is that farm workers are just as entitled to VR services as other people, and that farm workers are evaluated and served on an individual basis without special consideration of their farm worker status. However, the state/federal VR program has not generally accommodated the special needs of disabled farm workers, and service delivery barriers to farm workers have resulted. Congress has shown some interest in the special needs of disabled farm workers, but no clear mandate presently exists to provide equitable VR service delivery to them. IRA did not explore any possible legal implications of present service delivery disparities. It appears that the relative priority of disabled farm workers is an issue that remains to be settled.

Present VR emphasis on serving severely disabled clients could either enhance or hinder services to the farm worker population, depending upon how severity were defined. However, emphasis on the severely disabled is unlikely to increase services to farm workers, unless accompanied by a program to reduce the service delivery barriers described above.

Eligibility Requirements-- Counsellors uniformly state that a client is eligible for VR if he has (1) a disability which (2) poses a substantial handicap to employment, and (3) the client is likely to achieve gainful employment as a result of VR services. Interpretation of eligibility requirements varies from case to case and from counsellor to counsellor. 74% of the disabled heads of household in IRA's sample were partially disabled; i.e., their productivity in the fields was substantially limited by a disability, but they continued to engage in field work. At least some counsellors already consider such disabilities to qualify under

provision (2), above. IRA used that interpretation when estimating the number of farm workers eligible for VR.

Farm Worker Status-- Presently migrating field workers constituted a subgroup within IRA's sample. The remainder of the sample consisted of other kinds of seasonal agricultural workers or members of their immediate households. Included were migrants and others who were currently unemployed in agriculture, but had engaged in seasonal work within the last five years. Practically all were low income.

The above-average disability rates, and the special population characteristics related to VR service delivery barriers (except mobility) characterized the entire sample. Non-migrant farm workers included in IRA's sample need special VR services just as much as migrants do (except for accommodation of seasonal mobility). The proportion of the target population that is not currently migrating may increase as crop mechanization increases.

Defining Rehabilitation-- Given seasonal agricultural labor market shrinkage, the long-term earning potential of many farm worker clientele might be higher if they were trained for other vocations, instead of being rehabilitated to return to farm work. In such cases, VR can offer different degrees of rehabilitation, which the current status 26 statistics do not measure. Increased VR emphasis on preparing farm workers for other occupations would be more consistent with current DOL farm worker program priorities.

Services to Non-Disabled Family Members-- Increased family counselling, referrals of family members to other services, and involvement of the family in client rehabilitation and planning, all might work to reduce attrition and unsatisfactory closure rates. Current legislation allows transportation expense reimbursement and other services to non-disabled family members, at least for farm workers served under special migrant (30%)VR monies. The legislation appears ambiguous about whether income maintenance and training services might also be extended to non-disabled members of a disabled farm worker's immediate family. Such a policy would enhance the long-term benefits of VR to the disabled farm worker client. The policy might also reduce case attrition, and increase the likelihood of successful rehabilitation of the disabled farm worker client.

Financing Programs to Reduce Service Delivery Barriers-- Expansion of VR services to farm workers could

be accomplished either through reallocation of existing general program monies spent by certain state VR agencies, or by providing special purpose grants or other earmarked "90-10" grants. While some states have made an effort to hire more Spanish-speaking counsellors, voluntary reallocation of general program monies by the states appears unlikely.

The most feasible funding mechanism appears to be federal grants under section 304 of the Rehabilitation Act of 1973. RSA could reallocate 304 monies, to increase grants authorized by sub-section 304(c). Given present authorization, and assuming future appropriations at least at present levels, RSA may allocate up to $5,000,000 per year for 304(c) grants to states, compared to the $685,000 presently required by law.

Congressional action could increase the amount of 304 money RSA is required to spend under 304(c), if they increased the presently required 5% earmarking level. A general increase in 304 appropriations would, of course, also increase minimum required spending under sub-section 304(c). However, to be most effective, the initiative to expand 304(c) services to farm workers probably needs to come from within the Administration itself.

State 304(c) grantees might be induced or required to continue farm worker service projects with general program monies, following termination of the 90-10 grant period. This and other aspects of a national expansion effort might be better accomplished if 304(c) grants were administered and monitored centrally by a program specialist in Washington, D.C., instead of being delegated out to Assistant Regional Commissioners' offices.

A Service Delivery System for Farm Workers

The following elements of a service delivery system are proposed for RSA's consideration and further study. Additional refinement, including cost-effectiveness estimates, are beyond the scope of this report. The plan assumes that cost-effectiveness and equity considerations would make increased rehabilitation of handicapped farm workers a desirable goal, given present levels of appropriations to RSA.

The system would be national in scope. It would consist mainly of units within selected state VR

agencies. In addition, there would be a unit within RSA, a group of Outreach Units operated by local farm worker service organizations, and a national telephone referral unit. The system initially would be financed by a centrally co-ordinated series of grants authorized under sub-section 304(c) of the Rehabilitation Act of 1973. Grant awards would be contingent upon commitments by state agencies to continue their projects with general program monies after grant funds ran out. Other sources of funds might be required to support the RSA unit and the national telephone referral unit.

Federal Policy-- Numerical goals for farm worker case closures would be set for state VR agencies, based on farm worker population distribution. Farm workers with partial disabilities would be included within existing eligibility criteria. Farm workers would be defined to include any members of a household in which someone had engaged in seasonal agricultural employment within the past five years, subject to household income restrictions. Emphasis would be placed on vocations enabling client households to settle out of the seasonal work force, as well as on serving farm workers with no feasible potential for other vocations. Non-disabled members of a disabled farm worker's household would be eligible to receive social work, referral, income maintenance, training and placement services (assuming appropriate legislative authority).

RSA Farm Worker Unit-- Functions of the unit would include the following.

(a) Solicit and process applications, and award grants to state VR agencies, to initiate participation in the farm worker service delivery system.

(b) Solicit and process applications, and award grants to local farm worker service organizations, to function as Outreach Units.

(c) Monitor and evaluate grantee performance, and renew grants accordingly.

(d) Provide information and technical assistance services to grantees and other qualified disabled farm worker service projects.

(e) Co-ordinate with other federal programs and agencies.

(f) Recommend program and policy modifications, including legislative modifications.

The unit staff would include a qualified farm worker program specialist. Technical assistance and field evaluation services would be contracted out to the extent required.

State Planning Unit-- Functions of the unit would include the following.

(a) Plan and conduct feasibility studies to establish Local Service Units for disabled farm workers.

(b) Develop service co-ordination agreements with local farm worker service organizations to operate Outreach Units.

(c) Develop grant applications for Local Service Units and Outreach Units.

(d) Hire and train Local Service Unit staff.

(e) Promote development of local, regional or state training resources for disabled farm workers, to the extent such resources are lacking for Local Service Units.

(f) Monitor and report on activities of Local Service Units.

Local Service Unit: User/Settling-out Sites-- User/settling-out sites are typically rural and semi-urban areas where the agricultural work force is augmented by seasonal migrants from other areas. Included would be northern and midwestern states (e.g., Michigan, New Jersey, Oregon, and others), as well as certain regions within some southern and western states (e.g., California, North Carolina, Texas and others). (C.f. Appendix A.) At user sites, most of the target population resides there temporarily, anywhere from a couple of weeks to a couple of months or more. Often, some of that transient population attempts to settle out of the migrant stream, to become permanent residents of the user area. Functions of the local service unit would include the following.

(a) Increase referrals of disabled farm workers to local VR offices.

(b) Accept or assist with cases in progress referred by VR offices in other communities or states.

(c) During peak population seasons: provide evaluation and initial case planning or counselling services to

recently referred farm workers.

(d) During peak population seasons: provide limited, short-term treatment services, to the extent that clients' immediate earning opportunities are not impaired.

(e) During peak population seasons: provide referrals to VR facilities in migrants' home base communities, or in communities along major stops in migrants' seasonal itineraries.

(f) During peak population seasons: explore with transient farm worker clients the possibility of settling out locally, as part of an alternative case plan.

(g) Immediately after peak population seasons: provide short-term treatment services to transient clientele willing to delay leaving; provide referrals to VR facilities in migrants' home base communities, or in communities along major stops in the itinerary, to provide for follow-up vocational training and placement services.

(h) During off-seasons: provide counselling, planning, treatment, training, and social services to settling out and other local seasonal agricultural workers and their families.

(i) During off-seasons: promote development of needed training facilities for disabled farm workers, in co-ordination with other community elements.

Outreach, recruitment, evaluation and social services would be delivered in co-ordination with an Outreach Unit. The Local Service Unit would be staffed by especially qualified and trained VR counsellor(s). Social services would be provided by an especially qualified and trained social worker, either on staff or on consultantship, or on the staff of the Outreach Unit. The counsellor would be housed reasonably close to the target population, probably at either a VR office or at the offices of the Outreach Unit. Qualified receptionist services would be provided. The counsellor(s) would be supervised both by the local VR supervisor and by the State Planning Unit. The Local Service Unit would have a special budget for training and income maintenance expenses of farm worker cases.

Local Service Unit: Home Base Sites --

Home base sites have both non-migrating seasonal workers, and migrants who stay at home during off seasons. Major

home bases are located in Arizona, California, Florida, New Mexico, Puerto Rico and Texas. Settling out of seasonal farm work in home bases occurs two ways: alternative local employment is found, or the household (all or part) out-migrates permanently to another community with the hope of finding employment. Home bases are characterized by high structural unemployment and poverty. Functions of the Local Service Unit would include the following.

(a) Increase referrals of disabled farm workers to local VR offices.

(b) Accept or assist with cases in progress referred by VR offices in other communities or states.

(c) During local work seasons: provide evaluation and initial case planning or counselling services to farm worker referrals.

(d) During local work seasons: provide limited short-term treatment services to the extent that immediate earning opportunities are not impaired.

(e) During off-seasons (e.g., certain winter periods): provide counselling, planning, treatment, training, and social services to migrant clientele while they are at home and out of work.

(f) During periods of seasonal out-migration: provide such services to non-migrating farm worker clientele.

(g) During periods of seasonal out-migration: promote development of needed training facilities for disabled farm workers, in co-ordination with other community elements.

(h) To the extent that needed training facilities will not be provided otherwise, work with the State Planning Unit to develop VR-operated training programs well suited to the needs of disabled farm workers. (E.g., pre-vocational training.)

(i) Co-ordinate with VR offices in other communities or states, to arrange training or placement for clients wishing to out-migrate permanently.

Administrative arrangements would be similar to those for units serving user/settling-out sites.

Outreach Unit: Local Farm Worker Service Organizations-- The Outreach Unit could be operated by a

local migrant service agency or incorporated community organization, or by the local VR office. The former would likely require lower costs per case, and would provide a useful degree of flexibility in promoting locally needed training facilities for disabled farm workers. Functions of the Outreach Unit would include the following.

(a) Preliminary screening at farm worker population sites to detect farm workers apparently eligible for VR services.

(b) Preliminary information and counselling services to apparently eligible farm workers.

(c) Authorization and arrangement of medical evaluations of apparently eligible farm workers.

(d) Referral to the Local Service Unit.

(e) Provision of transportation services as needed.

(f) Optional: provision of social services and family counselling and referral services, in co-ordination with the Local Service Unit.

(g) Optional: provision of evaluation and, when authorized by the Local Service Unit, selected treatment services. (E.g., the Outreach Unit might be operated by a PHS migrant health project grantee.)

(h) Promotion, advocacy, or organization of needed training resources suitable for disabled farm workers.

The Outreach Unit activities would be co-ordinated closely with those of the Local Service Unit. Numerical goals would be set on an annual or seasonal basis for case referrals and evaluations, subject to the approval of the State Planning Unit. Basic grants would be awarded by the RSA Farm Worker Unit in conjunction with grants awarded the state VR agency. The state VR agency grantee would provide additional support for the Outreach Unit. State support would be on a cost-plus-fee-per-case basis, up to a set maximum. Outreach Units, whether operated by a local private non-profit organization, another agency, or the VR agency itself, would be required to have a policy board with a fixed minimum proportion of farm workers. That board would also be advisory to the Local Service Unit.

National Telephone Referral Unit-- The unit's staff would include especially qualified and trained counsellor(s). Inward and outward wide area telephone

service (WATS) would be maintained, with one telephone number disseminated nationally to all farm worker clientele through their counsellors. The grantee operating the unit could be one of the participating state agencies. Functions of the National Telephone Referral Unit would include the following.

(a) Assist farm worker VR clients in re-establishing service delivery, particularly after they have relocated.

(b) Assist farm worker VR clients in obtaining short-term non-VR services from agencies in their area during crises while in transit. (E.g., emergency food and medical service referral.)

(c) Provide follow-up services for such referrals, with the assistance of VR staff in the client's area.

(d) Compile and maintain a national referral directory of VR offices, also identifying Local Service Units and Outreach Units of the farm worker VR service delivery system.

(e) Compile and maintain a directory of emergency and other non-VR services for farm workers (based on information obtainable from the Juarez-Lincoln migrant program and other programs and agencies).

(f) Regularly disseminate updated directories to Local Service Units and Outreach Units of the farm worker VR service delivery system.

(g) Assist counsellors in maintaining follow-up contact with farm worker clients.

The above plan incorporates recommended objectives for RSA and State VR Agencies, as suggested by IRA's findings and conclusions. Training for counsellors would focus on counselling practices recommended herein.

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LIST OF ABBREVIATIONS

ABE	Adult Basic Education
ADC	Aid to Dependent Children
AJC	Arizona Job College
AFDC	Aid to Families with Dependent Children
AFDC-U	Aid to Families with Dependent Children with Unemployed Fathers
ASPE	Assistant Secretary for Planning and Evaluation, DHEW/OS
BES	Bureau of Employment Security, DOL
BLS	Bureau of Labor Statistics, DOL
CETA	Comprehensive Employment Training Act
CEP	Concentrated Employment Program
creaming	the practice by VR counsellors of accepting very easy-to-rehabilitate clients who probably would have succeeded without VR services
DOL	U. S. Department of Labor
DHEW	U. S. Department of Health, Education and Welfare
EOA	Economic Opportunity Act
ERS	Economic Research Service, USDA
ESEA	Elementary and Secondary Education Act

ESL	teaching English as a second language (also TESOL)
FLS	Farm Labor Service, DOL
FY	fiscal year
farm worker	migratory or seasonal agricultural worker or a member of such a worker's household
GAO	Government Accounting Office, U.S. Comptroller General
HEW	U.S. Department of Health, Education and Welfare
IRA	Interstate Research Associates
Last Yellow Bus	National Migrant Farm Worker Program, funded under MDTA
MDTA	Manpower Development and Training Act
OCD	Office of Child Development, DHEW
OE	Office of Education, DHEW
OEO	Office of Economic Opportunity, Executive Office of the President of the U.S.
OIC	Opportunities Industrialization Center
OJT	on-the-job training
OS	Office of the Secretary
OSHA	Occupational Safety and Health Act
PA/VR	co-operative projects operated by public assistance agencies and state vocational rehabilitation agencies
PHS	Public Health Service, DHEW

PSU.	primary sampling unit
R-300.	data collection instrument used by VR counsellors, as part of the state/federal VR case statistics reporting system
RMS.	Rural Manpower Service, DOL
RSA.	Rehabilitation Services Administration, DHEW/SRS
SER.	Project SER, Jobs for Progress, Inc., funded by DOL
SRS/DHEW	Social and Rehabilitation Service, DHEW
SRS/USDA	Statistical Reporting Service, USDA
SSU.	secondary sampling unit
TRC.	Texas Rehabilitation Commission
target client.	recipients of VR services who are disabled migratory or seasonal agricultural workers, or who are members of families or households of migratory or seasonal agricultural workers
target family.	families or households which include both a disabled member, and a migratory or seasonal agricultural worker
target patient	disabled member of a target family being examined or treated by a physician
target pop	the population of target families in the U.S.
UFWOC.	United Farm Workers' Organizing Committee

USDA	U.S. Department of Agriculture
VR	vocational rehabilitation
VRA.	Vocational Rehabilitation Administration, DHEW/SRS
WATS	Wide Area Telephone Service

I. INTRODUCTION

Background

Migratory and Seasonal Agricultural Workers[1]

The people who earn their livings as seasonal farm workers appear to be the poorest of the nation's working poor. They are variously estimated to number anywhere from 600,000 to 5,000,000 (including dependents), although no definitive demographic data have been available. While farm workers in general earn an average of $1,580 per year, the income of seasonal agricultural workers, earning most or all of their income from such work, is unknown.

They are generally employed as manual laborers by several growers each year, for harvests and other labor-intensive phases of certain fruit, vegetable and other crops. Many such jobs are extremely demanding physically, requiring prolonged stooping, crawling, crouching or walking, often in very hot or cold weather.

The people who make their livings from seasonal agricultural employment generally live in poverty-stricken rural areas. About one-third of them migrate away from home each year, to find temporary seasonal work in communities outside their home county or state. Roughly one-third of those migrants cross state lines each year. Most are members of racial or ethnic minorities: Blacks, Chicanos, Puerto Ricans, Native Americans, Mexicans (i.e., citizens of Mexico), Filipinos, and others. Migrants' annual itineraries tend to be within one of three major "streams": the east coast stream, based in Florida; the west coast stream, based in California; and the largest, the mid-continent stream based in south Texas. The total number of migrants has been variously estimated to be between 170,000 and over 1,000,000.

While the great majority of seasonal workers are U.S. citizens, their living and working conditions are well below conventional standards for this country.

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[1] More detailed information is presented in Appendix B.

Migrants' conditions tend to be worse than other farm workers'. Common problems include pesticide poisoning, injury and death by farm machinery, child labor law violations, and employer-provided housing lacking normal insulation, water and sanitation. As a group, agricultural workers have generally been partially or wholly excluded from the usual protections offered by federal and state laws governing fair labor standards, minimum wage and collective bargaining rights. Within workers' families, low income is associated with sub-standard housing, high rates of untreated chronic and acute health and medical problems, relative isolation from public service agencies, and relatively short life spans.

The poor who depend on seasonal farm work are generally unable to find and qualify for non-agricultural employment. They suffer from structural unemployment and under-employment, which limits their earning power. They typically have less than a grammar school education, have little if any recognized job skills, suffer from low social status due to racial or ethnic minority, and live in communities with above-average rates of unemployment. Their relative lack of wage bargaining power makes them especially attractive to agricultural employers.

Large agricultural producers have traditionally obtained seasonal labor outside the general U.S. labor market. Besides hiring otherwise unemployed poor, growers employ students, housewives, and foreign citizens. Continued reliance on workers from Mexico and other countries with low costs of living has further depressed wages paid domestic seasonal agricultural workers.

In recent years, agricultural technology has exacerbated structural unemployment among the poor who depend upon seasonal farm work. New developments include horticulture and mechanical harvesting techniques. The poor have been displaced more than other seasonal workers (such as students). In the period from 1965 through 1971, over one-half the migrant work force has stopped migrating, apparently because of jobs lost to harvest mechanization.

For more than thirty years, federal officials and legislators have held re-occurring investigations of seasonal farm workers' living and working conditions. However, action was not taken until the 1960's when attempts to unionize farm workers gained strength. Much of the efforts at reform during the 1960's were

associated with passage of the Economic Opportunity Act. Since that decade, the movement toward reform has subsided, leaving little hard evidence that special governmental action had any real effect on farm workers. The limits of the impact of special programs are attributed to insufficient spending, lack of inter-agency co-ordination, and failure to eliminate many of the previously legislated exemptions of agriculture from other labor laws.

Rehabilitation Services for Disabled Migrants[2]

In 1967 the Vocational Rehabilitation Act was ammended to authorize special projects to rehabilitate handicapped migratory farm workers. Responsibility for the program was given to the Rehabilitation Services Administration (RSA), U.S. Dept. of Health Education and Welfare. State rehabilitation agencies were to apply to RSA for funding of local "migrant" projects.

Authority for the projects was provided by Section 17 of the Vocational Rehabilitation Act. As it turned out, Congress never included Section 17 in any of its appropriations for vocational rehabilitation, so the migrant program was never implemented. RSA attributed Congressional inaction to "lack of information identifying the unique problems inherent in serving the migrant population."[3]

Interest in handicapped migrants persisted within RSA. It was assumed that migrants had an above-average rate of disabilities, somewhere between 10 and 15 per cent. Yet, virtually none were being treated under the regular vocational rehabilitation program.

RSA felt that few migrants received rehabilitation services, and that few of those receiving

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[2] This section is based primarily on background information supplied the Project Director by RSA personnel, SRS guidelines issued for this Project, legislative documents, and Congressional personnel interviewed by the Project Director.

[3] Memorandum to SRS Regional Commissioners, from James F. Garrett, Assistant Administrator, SRS/ORD, and Edward Newman, Commissioner, RSA, May 5, 1972; p. 2 of the attached "Grant Guidelines for Comprehensive Vocational Rehabilitation Services for Migratory Agricultural Workers."

services were actually rehabilitated. It was estimated that during the fiscal year (FY) 1970, between 550 and 660 disabled migrants received vocational rehabilitation (VR) services, but only between 165 and 175 were rehabilitated.

RSA explained its failure as follows:

> . . . this target population is highly mobile. . ., which produces a series of complex problems in the delivery of services to the disabled migrant and his family, particularly in tracking down the disabled individual.

It was also felt that other service delivery problems might exist, such that "their social, economic, and political problems and their unique life style pose serious obstacles which merit special consideration and attention. . . ."[4]

Despite Congress' decision not to fund Section 17, other funds were used to support three, state-operated local projects specifically designed to rehabilitate migratory or seasonal farm workers. RSA also moved to establish a research and demonstration program for migrants, based on the assumption that a comprehensive, family-oriented approach would help overcome service delivery barriers. IRA received support to conduct the initial research phases of the program, in cooperation with designated state agencies. This Report is the result of that effort.

While the study was in progress, Congress changed its position on funds for handicapped migrants. In the new Rehabilitation Act signed into law in 1973, Section 17 was eliminated. Instead, Title III of the new Act authorized projects for any of a number of special populations, including migrants and, for the first time, seasonal farm workers. Largely as a result of preliminary findings from this study, the new Act earmarked a minimum of 5% of all Section 304 appropriations for seasonal farm workers. In effect, RSA was given a new Congressional mandate to begin expanding services to migratory and seasonal farm workers.

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[4] Ibid

In addition, other possible funding sources were Title I Part "B" monies, Title I Part "C" "expansion monies," Title II research and training funds, and "IGA monies" involving joint funding with other federal programs.

Interstate Research Associates

IRA's interest in migratory and seasonal farm workers dates back to the formation of the organization in 1968. IRA was incorporated as a non-profit research and consulting firm by persons committed to resolving problems facing Chicano communities and other communities of rural or Spanish-speaking poor. IRA has sustained itself primarily by providing paid training and technical assistance services to governmental agencies and grantees with programs in health, education, manpower training and development, housing, or economic development serving low-income populations. In addition, IRA has provided technical services to local, regional, and national advocates for Spanish-speaking minorities.

The Problem

The purposes of the project were specified by grant guidelines issued by SRS and RSA. The Project served a general goal: to "develop, demonstrate, and implement a comprehensive vocational rehabilitation service delivery system tailored to the needs of handicapped migratory agricultural workers and members of their families."[5] IRA was asked to survey the vocational rehabilitation needs of the migrant farm worker population, and develop a national plan to meet those needs, in cooperation with designated state agencies.[6]

The problem of Congressional inaction, attributed to "lack of information identifying the unique problems inherent in serving the migrant population," guided conceptualization of the Project. The primary focus of the Project was on isolating unmet needs for services, and barriers to service delivery, analyzed in

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[5] Ibid., pp. 1-2.

[6] Letter from Garrett and Newman (July 3, 1972), in IRA files.

terms of specific implications for practice and VR program planning.

Related Literature and Research

Target Population

Previous attempts to study disabled migratory and seasonal farm workers have depended upon non-probabalistic techniques. There had been several attempts to describe qualitatively the kinds of disabilities and service delivery barriers likely to be problematic. However, there had been no reliable basis for estimating the size of the populations needing or receiving rehabilitation services. The distribution of related population characteristics likewise had not been reliably estimated.

Hearing testimony leading to passage of the Migrant Health Act in 1962 dealt extensively with the kinds of acute and chronic medical and health conditions observed among migratory farm workers. That testimony was preceded by other hearings over a twenty-year period that often touched upon unmet health and medical needs.[7] Progress reports of the Migrant Health Project reaffirmed the widespread existence of unmet medical and health service needs among migrants. Lindsay and Johnston have discussed the implications for medical and health service

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[7] C.f., "Federal Policy," Appendix B.

delivery.[8,9,10,11]

Reul addressed herself specifically to disabled migratory agricultural workers, stressing the multiplicity of economic and social problems likely to affect the migrant family.[12] Her research is based largely on participant-observer and clinical case studies, which form the basis for her conclusions about the problematic socio-cultural consequences of migration.[13]

While no Census data have been compiled on the target population as such, a 5% sample from the 1970 Census does suggest that migratory and seasonal agricultural workers may have above-average disability rates. Respondents were asked about work disabilities and occupational category and status. Farm workers were listed, although with no distinction between seasonal and year-round employees. Twelve per cent of the males employed as farm workers, between the ages of 18 and 64, reported themselves disabled. This compared with 8-1/2% for all occupational categories combined. Virtually all of the

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8 H. L. Johnston, "Migrant Health Program Statistics," unpublished working paper prepared for the Migrant Health Project, U.S. Public Health Service, Rockville, Md., September, 1970.

9 H. L. Johnston, New Directions Under the Migrant Health Act (Atlantic City: National Conference on Social Work, 1965).

10 J. R. Lindsay and H. L. Johnston, "Meeting the Health Needs of the Migrant Worker," Journal of the American Hospital Association, 1965.

11 J. R. Lindsay and H. L. Johnston, "Review of Migrant Health Goals and Activities," paper read before the Second North Carolina State Migrant Conference, Reidsville, N.C. April 29, 1966.

12 Myrtle R. Reul, "A Review of the Migrant as a Rehab Client," Rehabilitation Record, Vol. 10, no. 6 (November-December, 1969), pp. 1-7.

13 Reul, The Migration Episode and Its Consequences (East Lansing, Michigan: Center for Rural Manpower and Public Affairs, Michigan State University, 1972).

12.1% were partially disabled and were still working. No disability rates were given for unemployed farm workers, thereby missing the totally disabled population. However, the unemployed as a whole were found to have higher disability rates.[14] More detailed data are available for some states, due in part to a series of studies funded by DOL on unemployment and disability insurance.[15]

Earlier studies of the migrant population have been unable to overcome sampling problems associated with poor documentation of ever-changing geographic distribution.[16,17] Sampling problems have been complicated by disagreement over definition of the population at risk, implicit in the conflicting eligiblity requirements for DOL, OEO, PHS, and OE migrant service programs, and incompatible definitional categories used for statistical research by DOL/RMS, USDA/SRS, and USDA/ERS.[18]

Other statistical data dealing with migrants generally pertains only to those who happen to have been contacted by some service program, rather than both the served and the unserved of the population at large. Examples include the data produced by the

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14 U.S., Bureau of the Census, Census of Population: 1970: Subject Reports: Final Report PC(2)-6C: Persons with Work Disability (Washington, D.C.: U.S. Government Printing Office, January, 1973), pp. 54, 57, 60, 63, 66, 69, 72, 75.

15 C.f. "References," pp. 36-37.

16 IRA Summary Report: PEBSI 1970, Richard J. Bela, Project Director; [report of the migrant component of the Program Evaluation by Summer Interns' Project] (Washington, D.C.: Interstate Research Associates, (1971)).

17 Unpublished study in progress as of May, 1973, conducted for the Assistant Secretary for Program Planning & Education, U.S. Dept. of Health, Education and Welfare, by Development Associates, Inc., 1521 New Hampshire Ave., N.W. Washington, D.C., 1972-3.

18 C.f. Appendix "B".

Migrant Research Project and the Migrant Division of OEO (later DOL). [19,20]

The Migrant Labor Health Project in the Lower Snake River Valley of Idaho and Oregon addressed itself specifically to the need for VR services. Funded as an SRS demonstration project, they restricted their services to physical examinations and referrals as they took note of the kinds of disabilities found among their non-systematically selected sample of client-patients. They reported that needs among migrants for health and medical treatment and VR services were relatively limited.[21] However, one of the co-authors stated in a telephone interview several years later that pressure from the local medical community may have adversely affected the validity of that finding.

Few studies consider migratory and non-migratory seasonal farm workers together as a target population. However, the larger population of all low-income rural residents has been studied extensively. One of RSA's Institutes focused on the "disabled disadvantaged in a rural setting."[22]

VR Services for Migratory and Seasonal Farm Workers

There appears to be no published research

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19 Migrant Research Project: Annual Report, 1970 (Silver Spring, Md.: Manpower Evaluation & Development Institute, 1971).

20 U.S., Comptroller General, Report to Congress: Impact of Federal Programs to Improve the Living Conditions of Migrant and Other Seasonal Farmworkers: Department of Agriculture, Department of Health, Education and Welfare, Department of Labor, Office of Economic Opportunity (B-177486; Washington, D.C.: U.S. General Accounting Office, February 6, 1973).

21 L.J. Peterson, Migrant Labor Health Project: Lower Snake River Valley--Idaho and Oregon (Boise: Idaho State Dept. of Health).

22 Report from the Study Group on Vocational Rehabilitation of the Disabled Disadvantaged in a Rural Setting, Raymond H. Simmons, Chairman, and John D. Hutchinson, Univ. Co-ordinator and Editor, Eighth Institute on Rehabilitation Services, St. Louis, May 17-20, 1970 (Information Memorandum RSA-IM-71-46; Washington, D.C.: U.S. Dept. of Health, Education, and Welfare, Social and Rehabilitation Service, Rehabilitation Services Administration). Includes bibliography.

reporting or estimating the actual extent of VR services provided the target population.[23,24] In the absence of data on the current impact of services on the target population, survey research offers a rather costly but valid means of assessing that impact. Evaluation of a variety of service programs for migrants through survey research was utilized by Bela for the PEBSI project funded by HEW/ASPE.[25] Nagi's survey research on the impact of VR and other programs on the general public was in progress at the time of the present IRA Project. His study also uses definitions and classifications of disabilities, and measures their extent among the general public, thereby providing a cross-section of the U.S. population could be compared with IRA's target population.[26]

Reports of RSA institutes include suggestions for improving various kinds of VR services. One of the most relevant was on the disabled disadvantaged in a rural setting.[27] The literature suggests that disabled migratory and seasonal farm workers are likely to be relatively difficult clients to rehabilitate. There is

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23 Characteristics of Clients Rehabilitated in Fiscal Years 1966-1970: Federal-State Vocational Rehabilitation Program, prepared by Division of Monitoring and Program Analysis, Statistical Analysis and Systems Branch (DHEW Publication No. (SRS) 72-25402; Washington, D.C.: U.S. Dept. of Health, Education and Welfare, Social and REhabilitation Service, Rehabilitation Services Administration).

24 State Data Book: Federal-State Vocational Rehabilitation Program: Fiscal Year 1970, prepared by Division of Monitoring and Program Analysis, Statistical Analysis and Systems Branch (SRS) -72-25403; Washington, D.C.: U.S. Dept. of Health, Education and Welfare, Social and Rehabilitation Service, Rehabilitation Services Administration).

25 IRA, op. cit.

26 Saad Z. Nagi, "Service Organizations and the Public: A Research Proposal" (Columbus, Ohio: July, 1972). (Mimeographed).

27 C.f. "References," pp. 37-38.

rapid shrinkage in their labor market,[28] such that merely restoring or treating clients to return to farm work is no longer a routinely acceptable vocational objective for VR case plans. National Migrant Worker Programs authorized by EOA-III-B, MDTA/E&D, and CETA-303, will probably be focusing primarily on training and preparing migratory and seasonal farm workers for "stable year-round employment providing an income above the poverty level. . .", and only secondarily will be providing supportive and ameliorative services to the present farm work force.[29] The target population's need for alternative employment, and its relative lack of suitable education and training, would tend to require relatively intensive VR counselling and training, in addition to indicated restoration or other treatment.[30,31] The current VR agency statistical performance measures appear to value quantity of low cost rehabilitations over intensive efforts with difficult cases, thus suggesting the need for case weighting procedures designed to remove dis-incentives to providing intensive

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28 C.f. "Labor Market Shrinkage," Appendix B, pp. 124-27.

29 "Strategy Paper for Migrant and Seasonal Farmworker Programs," unpublished staff working paper from the U.S. Dept. of Labor, n.d. [Typewritten and duplicated, approximately early 1974.] [p. 4.]

30 C.f. Appendix B.

31 Present trends for some migrants to settle-out in or near urban industrial areas were discussed in terms of employment, economic and social difficulties by [Bela, Cortés and Porter], The Chicano Migrant Farm Worker Community in Texas, the Great Lakes States and Florida (Washington, D.C.: Interstate Research Associates, February, 1972), pp. 44-47. The depth of counselling and financial support needed to facilitate a smooth transition might be suggested by research findings dating from 1958, by Lyle W. Shannon, Robert McGinnis and Thomas J. Scheff, at the University of Wisconsin, concerning assimilation of migrant workers.

training services to the target population client.[32,33] The availability of suitable training programs already training non-disabled migratory and seasonal farm workers suggests expansion of local VR inter-agency relationships for referral, evaluation, training, and placement to include such programs.[34]

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32 State Vocational Rehabilitation Agency: Fact Sheet Booklet: Fiscal Year 1971 (Information Memorandum A-IM-72-45; Washington, D.C.: USDHEW/SRS/RSA, January 20, 1972). Performance of state VR agencies is compared in terms of federal funds expended, types of programs, number of cases, success rates, cost per rehabilitation, per capita expenditures, and similar characteristics.

33 Ronald Conley, "Weighting Case Closures: Concepts, Problems," Rehabilitation Record, Vol. 14, no. 5 (September-October, 1973), pp. 29-33; and John H. Noble, Jr., "Actuarial System for Weighting Case Closures," Rehabilitation Record, Vol. 14, No. 5 (September-October, 1973), pp. 34-37.

34 Programs claiming some success with vocational training of migratory and seasonal agricultural workers for other occupations include the following: certain Opportunity Industrialization Centers (OIC's), formerly funded by DOL and now supported by local organizations and agencies, including revenue sharing; some EOA-III-B grantees listed in U.S., Executive Office of the President, Office of Economic Opportunity, Migrant Division, OEO Programs for Migrant and Seasonal Farm Workers (Washington, D.C.: n.d.), and which are now administered by DOL; contractors to the DOL National Migrant Farm Worker Program ("Last Yellow Bus Project") funded by MDTA discretionary monies; DOL funded Jobs for Progress, Inc., grantees (ProjectSER).

References: DOL Unemployment and Disability Studies

R. H. Tremblay, Impact of Extending Unemployment Insurance to Agriculture in Vermont, Vermont Agricultural Experiment Station, Burlington, Vermont, December, 1972.

Roger C. Covey and A. S. Holmes, The Economic Impact of Extending Unemployment Insurance to Agriculture in Maryland, University of Maryland, November, 1972.

The Cost and Incidence of Coverage and Benefits from the Extension of Unemployment Insurance to Agricultural Workers in Pennsylvania, Agricultural Workers in Pennsylvania, Department of Agricultural Economics and Rural Sociology, December, 1972.

Galen C. Moses and L. Polopolus, The Impact of Extending Unemployment Insurance to Agricultural Workers in Florida, University of Florida, September, 1972.

Conrad Fritsch, K.J. Nergart, Extension of Unemployment Insurance to Texas Agriculture, Texas A&M University in conjunction with: Regional Research Project NE-58 of the Northeast Agricultural Experiment Stations, January 10, 1973.

Bernard L. Erven, Extension of Unemployment Insurance to Agriculture in Ohio-Coverage, Benefits, and Costs, Ohio Agricultural Research and Development Center, Wooster, Ohio, February, 1973.

R.D. Bieker, J. G. Elterich, and Haley, The Impact of Extending Unemployment Insurance to Agriculture in West Virginia, Agricultural Experiment Station, University of Delaware, Newark, Delaware, June, 1971.

J.G. Elterich, R.F. Bieker, The Impact of Extending Unemployment Insurance to Agriculture in Delaware, Agricultural Experiment Station, University of Delaware, Newark, Delaware, June, 1972.

Robert D. Emerson, Migration and the Cost of Unemployment Insurance Protection for Agricultural Workers, Food and Resource Economics Dept., Univesity of Florida, November, 1972.

Ward W. Bauder, and C.A. Bratton, The Impact of Extending Unemployment Insurance to Agricultural Workers in New York State, Economic Research Service, U.S.D.A., and Dept. of Rural Sociology, Cornell University, January, 1972.

Charles Sevick, G. Inman, L. Thommen, and M. Grannell, California Unemployment Insurance Program, "Estimated Cost of Extending Unemployment Insurance Coverage to Farm Workers - 1969," May, 1971.

W.W. Bauder, J.G. Elterich, R. Farrish, and J.S. Holt, Impact of Extension of Unemployment Insurance to Agriculture, October 31, 1972.

Daniel J. Evans, and R.W. Hutt, Report on the Feasibility of Extending Unemployment Compensation Coverage to Farm Employers in Washington State, Research and Statistics Branch, February, 1973.

Economic Security for Hired Farm Workers, "Implications of Extending Unemployment Insurance to Hired Agricultural Labor," Minnesota Department of Manpower Services, November, 1972.

J.W. Carncross and G.W. Luke, An Analysis of the Variables Related to the Extension of Unemployment Insurance to Farm Workers in New Jersey, The State University of New Jersey, New Brunswick, September, 1972.

Edmund F. Jansen, Jr., The Impact of Extending Unemployment Insurance to Agriculture in New Hampshire, New Hampshire Agricultural Experiment Station; Durham, New Hampshire, January, 1973.

References: RSA Institutes

U.S., Dept. of Health, Education and Welfare, Social and Rehabilitation Service, "Vocational Rehabilitation Programs and Activities: Rules and Regulations," in U.S., Archives, Federal Register, Vol. 34 (October 17, 1969), p. 16824.

Placement and Follow-up in the Vocational Rehabilitation Process, a Report from the Study Group on Placement and Follow-up in the Vocational Rehabilitation Process, William J. Cox, Chairman, and Harold D. Viaille, University Co-ordinator, Ninth Institute on Rehabilitation Services, San Antonio, Texas, May 10-12, 1971 (DHEW Publication No. (SRS) 72-25007; Information Memorandum RSA-IM-72-53; Washington, D.C.: U.S. Dept. of Health Education and Welfare, Social and Rehabilitation Service, Rehabilitation Services Administration).

Recommended Standards for Closure of Cases,

a Report from the Study Group on Uniformity of Standards for Termination of Services to Clients, Curtis O. Little, Chairman, and Harold D. Viaille, University Co-ordinator, Seventh Institute on Rehabilitation Services, Lincoln, Nebraska: May 19-21, 1969 (Information Memorandum RSA-IM-71-24; Washington, D.C.: USDHEW/SRS/RSA).

Principles for Developing Co-operative Programs in Vocational Rehabilitation, Report of the Committee on Principles and Practices for Effective Interagency Relationships, Cooper Sontag, Chairman, Milton E. Wilson, Jr., Co-ordinator, Sixth Institute on Rehabilitation Services, University Park, Penn., May 20-22, 1968 (Rehabilitation Services Series Number 70-1; Washington, D.C.: USDHEW/SRS/Vocational Rehabilitation Administration).

Use of Support Personnel in Vocational Rehabilitation, Report of the Committee on Effective Utilization of the Rehabilitation Counselor and Supporting Staff, Harry Lucas, Chairman, and Richard R. Wolfe, University Staff Member, Sixth Institute on Rehabilitation Services, University Park, Penn., May 20-22, 1968 (Rehabilitation Service Series Number 69-13; Washington, D.C.: USDHEW/SRS/VRA).

The Research Setting

The Project was national in scope. Project headquarters were at IRA's Rio Grande Valley Office in Edinburg, Texas, in the midst of the nation's largest home base of seasonal migrants. Multi-county primary sampling units drawn for the survey were located near Benton Harbor (Michigan), El Centro (California), Kinston (North Carolina), Lubbock and McAllen (both in Texas). Secondary sampling units were residential areas, such as neighborhoods, colonias, camps or districts, populated by thirty or more seasonal farm worker families during the month of the survey, where at least 75% of the households were estimated to include one or more migrant or seasonal agricultural worker. The sample included both temporary and permanent residential areas.

Local agency study sites were confined to states whose VR agencies were designated by SRS as Project participants: California, Florida, Michigan, New Jersey, Oregon, and Texas. Agency personnel were interviewed at fourteen sites within those states. Most sites were within communities with a primarily agricultural economic base, with general populations of less than 100,000. Several of the sites were within 50 miles of major urban industrial areas.

All of the local agency study sites were within ten miles of areas populated by seasonal agricultural workers. The annual peak populations of agricultural workers and family members in each area was at least 3,000 per county.

II. METHODOLOGY

Sample of Agricultural Workers' Families

Defining the Universe

The universe was broadly defined. That enabled comparisons of the needs of sub-groups. Included were all families with member(s) who had been seasonal agricultural worker members since 1967.

Seasonal agricultural worker meant a person who had employment doing field work such as picking, thinning, cutting, or other hand work, being a crew leader, working in packing sheds, trucking produce out of the fields, or driving or operating farm machinery, all on a temporary or seasonal basis. Also included were persons who, although they may not have done such work during the specified time period, intended to do such work during the year of the interview.

A five-year time period was specified in order to include those who may have recently been displaced by mechanization, become totally disabled, or for other reasons had stopped performing seasonal work. A limited period was specified because of the number of former farm workers in the U.S. who have long since been assimilated into other occupational categories and life-styles, such that their special needs, if any, would not greatly overlap with those of today's migratory or seasonal farm workers.

Migratory and non-migratory seasonal agricultural workers were included, in order to test RSA's impression that migration alone was the principal service delivery barrier.

All family members were included, for the following reasons. A disabled, non-working member of a migratory family might still have to migrate with the rest of the family, thus posing service delivery problems. Other problems, such as language differences, minority status, relatively limited education, or cultural and attitudinal differences, might apply to all household members. The family unit was designated by the grant guidelines and Section 17 legislation as being of particular interest. Services directed toward the family unit were one of the possible strategies to improve agency efforts to rehabilitate disabled seasonal agricultural workers.

All household members were defined as family members, consistent with Section 17 legislation. That avoided having to make insignificant legal distinctions between unmarried and married parents, etc., and allowed the study to focus on the household as a functioning economic and social unit. Such units were already known to frequently include extended family members as well as nuclear family, and even households containing two unrelated nuclear families or fragments thereof, living together due to economic or other practical considerations.

The universe was defined as the population of households in the U.S., including single person households, in which one or more members had held seasonal agricultural employment within the past five years. Sampling feasibility required a further restriction: Households were selected from residential areas populated by (a) at least thirty such households, and (b) at least 75% such households.

Sampling Design

Design Problems -- In order to describe the universe with any known degree of precision, every household in the universe had to have an equal chance of being interviewed for the study. That simple rule of descriptive statistics led to complex sampling problems: First, the universe was distributed widely throughout the country. Second, the geographic distribution and size of the universe was described only by vague, general, unreliable, biased and conflicting statistical reports. (C.f. Appendix "B".) Third, the geographic distribution of the universe varied constantly due to seasonal migration. Fourth, the most detailed available estimates of geographic distribution were in the form of peak annual populations per locality, so that national compilations of such data theoretically would count the same migratory workers several times over in different localities at different times of the year. (E.g., Appendix "A".)

Previous sampling designs were rejected with the encouragement of RSA liaison. Rejected designs included quasi-probabalistic designs used by two previous studies for HEW/ASSPE, featuring arbitrary selection of interview sites "stratified" by racial-ethnic group and migrant stream.[35] This approach was

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[35] C.f. footnotes 16 and 17. This approach was suggested by SRS in guidelines for the present study.

rejected because data for true stratification was inadequate, and lack of randomness (enabling estimates of precision) would have limited the believability of findings.

Another sampling design rejected was random selection from case records of farmworker service programs such as those of EOA-III-B grantees.[36] That would have biased the sample in favor of households already receiving some services, which might have exaggerated the rate of contact with VR. It would have caused a bias against more mobile migrants, due to time elapsed between agency case record entries and sampling by IRA for interviews. Furthermore, outreach and eligibility procedures of services in different localities would have been uncontrolled.

Use of DOL Data -- Compensation for unstable geographic distribution was based on unpublished data compiled by DOL's Rural Manpower Service. That provided a model of the universe's geographic distribution (but not its absolute size). Data was available by month for each of the multi-county Agricultural Reporting Areas in the U.S., as defined by DOL's former Farm Labor Service (FLS) of the Bureau of Employment Security (BES). The data were from state employment security commissions, whose local office staffs estimated (with varying care) the number of seasonal farm workers employed each month in their respective Agricultural Reporting Area. This provided a model of the seasonal work force, broken down by geographical units small enough for sampling purposes, with the rather mobile population "frozen" in place for any given month.[37]

A three-stage random cluster sampling plan was developed:

(1) The primary sampling frame consisted of the DOL/BES/FLS multi-county Agricultural Reporting Areas. Each area was weighted according to its share of the universe during the month of the survey. Only five primary sampling units (PSU's) could be drawn, given our project resources.)

(2) The secondary sampling frame consisted of residential areas of seasonal agricultural workers,

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[36] C.f. Appendix B, "Federal Policy," for a description of EOA-III-B service programs.

[37] C.f. Appendix B, "General Characteristics" and "Federal Policy," for a description of available data on the universe.

either transient or permanent. The areas were defined as geographically delineated areas, such as neighborhoods, colonies, camps or districts which were expected to be populated during the month of the survey by thirty or more seasonal agricultural worker households, and in which at least 75% of all households were estimated to be seasonal agricultural workers' households. Data for the preparation of secondary sampling frames were gathered by field consultants indigenous to the PSU, and familiar with the local farm worker population and the agencies serving them.

The secondary sampling frame was weighted according to the locally estimated population distributions. Three to six secondary sampling units were drawn per PSU, to bring the estimated number of households up to 120 per PSU.

(3) A canvass of each secondary sampling unit (SSU) was held to identify all seasonal agricultural worker households in the residential area. The canvass was accomplished by screening questions asked at the beginning of data collection interviews.

Plans to Augment Sub-Groups

VR clientele -- In order to study farmworkers receiving VR, an attempt was made to augment the sample by randomly drawing farm worker clients from the files of co-operating state VR agencies. That plan was abandoned, however, when state representatives on the Project Advisory Committee indicated it was unfeasible.

Minority group and geographic representation -- Representation of all racial and ethnic groups in the universe, and of each of the three major geographic streams (including home base, user, and settle-out sites) was suggested by SRS. However, there was a good chance that smaller groups (such as Native Americans and Filipinos) might not fall within a small random sample of the universe. The Project Director suggested augmenting the random sample, using purposively selected sampling units to assure minority and geographic representation.[38] However, supplemental funds needed were not provided.

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[38] "Alternative Farmworker Sampling Designs," a working paper submitted to RSA on May 1, 1973. Reproduced in project progress report, June 7, 1973, Appendix G.

Comparison Group

The sample drawn for Dr. Nagi's study for RSA at the Ohio State University served as a comparison group. That survey of a large cross-section of the population of the U.S. was conducted through the Institute of Social Research at the University of Michigan in Ann Arbor. The IRA Project Director's attempts to establish comparability were greatly assisted by Dr. Nagi and RSA liaison. Survey insruments were adapted in part from Dr. Nagi's study.

Survey Operations and Sample Size

Third-stage sampling and interviewing were conducted in three rounds during late August and early September, 1973. Within 17 secondary sampling units, 748 residences were canvassed. Screening left a sample of 209 households. Of those screened out, 147 were found ineligible and 392 were unavailable.

The main cause of unavailability was persons not at home. As a cost-saving measure, the survey was conducted day and night, and many residences turned out to be empty during the day. Unavailability in general consisted of "not home" (23%); "seasonally vacant" (11%); "appeared to be home, but door not answered" (6%); "dwelling completely unoccupied" (4%); "interview refused" (3%); "available respondents under age" (3%); and "other" (1%).

Most interviews lasted ten to fifteen minutes, while interviews at households with disabled members were designed to last about two hours. Disabled respondents were offered compensation for participating in the longer interview. The disability rate was twice as high as expected. Thus, the sample was smaller than expected.

Interviews with Service Agency Personnel

Agency interviews were exploratory, to collect qualitative data on generally identified service delivery barriers and suggestions as to how to overcome them.

Rehabilitation counsellors -- Counsellors constituted the largest group of service agency respondents. State VR agency counsellors were selected only from states represented on the Project Advisory Committee. At each local VR office visited, interviews were sought primarily with counsellors who had contact with the target population. Some supervisors, other counsellors, outreach workers, and placement specialists were also interviewed.

VR Administration Staff -- The Project Advisory Committee was asked to provide specific information on state policies, procedures and operations. Documents supplied by other state and federal personnel also provided information.

Farm Worker Service Projects -- Three current VR demonstration projects were identified by RSA liaison; two were visited and additional information was sought on all three. Staff were also interviewed at non-VR service organizations with substantial numbers of clients who were migratory or seasonal agricultural workers. Included were local staffs of migrant health projects, EOA-III-B grantees, Opportunity Industrialization Centers (OIC's), and community organizations. Interviews there included vocational counsellors, others having farm worker client contact, administrators and program specialists. Farm worker service projects visited were located near VR offices already chosen for interviews.

Data Collection and Analysis

Variables Studied

Variables studied are listed in Appendix C.

Target Population Survey

All survey data were collected in quantifiable form by interviewers reading verbatim from completely structured survey instruments. Seven instruments were developed for the survey:

(1) Household sampling form -- This was filled out for every household residence observed during the canvass of each secondary sampling unit. (Appendix D)

(2,3,4) Basic interview -- All heads of households contacted were screened for survey eligibility by the first part of this instrument. Eligible households, through one respondent, were then screened for disabilities and were asked a few other questions. Two extended versions of the Basic Interview were used to collect additional information on about one out of five

households reporting no disabled members. (Appendix E)

(5) Supplement A was administered to each household member reported to be disabled. (Appendix F)

(6) Supplement B contained additional questions for the heads of households with disabled members. (Appendix G)

(7) Supplement C was designed to collect information from respondents who had been in contact with a VR facility. (Appendix H)

Field testing of early drafts of the instruments was monitored by tape recording. Particular attention was paid to validity problems related to language and cultural variation within the target population. Versions were prepared in simple English and simple Spanish. The latter gave alternative wordings to allow for differences between Chicano and Puerto Rican dialects.

Five teams of interviewers were hired, one for each of the five PSU's. Hiring criteria emphasized ability to establish rapport and gain the trust and co-operation of the target population. A secondary consideration was reading ability. With one exception, all fifteen interviewers were indigenous to their respective PSU's, and were of the same racial and ethnic groups as the majority of their respondents. Nearly all had themselves been migratory or seasonal agricultural workers. Each team was provided twenty-five hours of standardized training during a two and one-half day period immediately prior to the survey.

Data analysis consisted primarily of tabulations and cross-tabulations. Correlational analysis was planned but not performed due to time and resource constraints.

Interviews with Service Agency Personnel

Service agency personnel interviews were tape recorded, generally in private areas at respondents' places of work. Additional data provided by other, informal conversations with respondents were later dictated in summary form onto tape by interviewers. Respondents were informed that all information was to be kept in strictest confidence by IRA Project staff.

Exploratory interviewing was guided by a general

format outline used by interviewers, covering general issue areas. Projective techniques were used to probe sensitive areas. Useful digressions were encouraged. More structured interviews were found less productive.

Objective analysis of agency interview tapes was planned but not accomplished. Analysis was to have included codification of interview data. At least two coders not previously associated with the project were to have filled out instruments while listening to tapes. Cross-coder reliability was to have been measured.

Other Data

The Project also relied on publications and miscellaneous information supplied by representatives of the state/federal VR program. Advisory committee discussions contributed in large part to program recommendations herein.

III. FINDINGS

Incidence of Disabilities Among Farm Workers

Disability Rates

Of all households, 44.5% had one or more members who were partially or totally disabled. This means that physical, mental or emotional problems were reported to limit one or more household members in the amount or kind of work they could do, or prevented them from attending ordinary public schools, or limited their normal recreational abilities, or caused them to require a considerable amount of extra care. (Estimated precision: ± 6.7%, @ > .95 level of confidence.)

TABLE 1: SAMPLE SUBGROUPS

(a) All households (i.e., entire sample of households with one or more members who qualify as migratory or seasonal agricultural workers).

(b) Households with one or more disabled members.

(c) Heads of house (or their representatives; i.e., Basic Interview respondents).

(d) Heads of households with one or more disabled members (or representatives of heads of those households).

(e) Disabled individuals (i.e., persons with partial or total disabilities).

(f) Heads of house plus disabled individuals (i.e., subgroups (c) and (e) combined).

(g) Heads of households with one or more disabled members, plus disabled individuals (i.e., (d) + (e)).

(h) Employed members of subgroup (g).

(i) Households with migratory members.

(j) Households with migratory and disabled members.

Of the persons first interviewed at each household (generally heads of households) 31.3% reported themselves disabled; i.e., limited in the amount or kind of work they could perform because of a physical, mental or emotional problem. (Base: sub-group c.)[39] (Estimated precision: ± 6.3% @ >.95 level of confidence.)

Disability rates among migratory and seasonal agricultural workers appear to be about three times as high as those of the U.S. population in general, although time constraints have prevented exact comparisons. Of the U.S. cross-section sample studied by Dr. Nagi, 10.7% reported themselves disabled or limited in work roles and activities. Subgroups of his sample with lower income, less education and greater age had higher disability rates, ranging from 22.1% to 35.5%. The closes comparable figure presently available from the IRA study is 31.3% (for subgroup c).

Population Estimates

There are somewhere between 230,714 and 449,473 seasonal farm worker households in the nation that have one or more disabled members, depending upon which government statistics are used.[40]

Assuming the midpoint of 390,094 households, at least 137,313 have disabled members with employment potential. If increasing productivity of housewives is considered a legitimate VR objective, the number with rehabilitation potential would be 292,571.[41] Wives and children often contribute to their husband's wages by working with him in the fields, but they are frequently not counted in

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39 Sample subgroups are described by Table 1, p. 48, above.

40 The sample had 44.50% (± 6.74%) such households, with an average size of 5.7 members. McElroy's estimate of 611,000 seasonal employees (c.f. Appendix B, footnote 7), assuming one "hired" employee per household, yields the lower estimate (@37.76%). OEO's estimate of 5,000,000 eligible for EOA-III-B "migrant" services (c.f. Appendix B, footnote 8), divided by 5.7 persons per household, gives an estimate of 877,192 households, yielding the higher estimate (@51.24%). Neither of these estimates seem very sound, but they are the best possible given available population data. OEO's definition of the population corresponds more closely to that used by our Study, but the basis for OEO's rather round estimate is unknown.

41 The disabled in the sample included 33.0% hired workers, 39.8% housewives, 2.2% students, 16.1% retired workers, and 8.9% others who had never been hired. Assuming at least hired workers and students

estimates of the hired seasonal work force.

Types and Severity of Disabling Conditions

The term "disabled" refers throughout this Report to both partially and totally disabled persons. Partially disabled with employment potential are assumed to be eligible for VR.[42]

Of all the disabled interviewed, 7% were blind and 56% had other uncorrected visual impairments; 16% had uncorrected auditory impairments.

In a series of interview items concerning symptoms related to disabilities, the following were frequently reported as being severe: backaches or pain in the back or spine (37%); pains, aches or swelling in other parts (27%); weakness, tiring easily, no energy (38%); nervousness, tension, anxiety, depression (29%).

The following tasks were most frequently described as impossible, or possible only with great difficulty, due to disabling conditions: stooping, bending or kneeling (44%); going up and down stairs (39%); lifting or carrying weights of about ten pounds (34%) and standing for long periods (33%).

Percentage totals for both of the preceeding series exceeded 100% because of high rates of multiple disabling conditions and multiple effects of disabling conditions.

Respondents attributed their symptoms and

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to have rehabilitation potential (.330 + .022) x 390,094 households with at least one disabled member yields at least 137,313 with potential. Adding housewives: (.330 + .022 + .398) x 390,094 yields at least 292,571 with rehabilitation potential. These estimates are merely suggestive, since the small bases for these statistics preclude useful confidence intervals at reasonable levels of confidence.

42 All persons reporting themselves disabled said they were limited in the amount or kind of work they could do because of a physical, mental, or emotional problem. What amounts to a total disability in some occupations frequently is merely a partial disability for manual farm laborers. Payment for farm work in piece rates (instead of hourly wages) encourages employment of the partially disabled family member of limited productivity.

impairments to a wide range of causes. Chief among them were skin problems (17%); accidents, injuries and falls (14%); emotional or nervous problems (12%); arthritis, rheumatism, bursitis, neuritis (12%); breaks, strains, sprains or dislocation of ribs or joints, or cracked ribs (11%); other general or vaguely described references to muscular-skeletal or nervous disorders (e.g., "bad back," or "my legs hurt") (10%); high or low blood pressure (10%); and kidney or bladder disorders, or nephritis (10%). Multiple causes and overlapping codes produced a total percentage of more than 100%. Data analysis allowing determination of the extent of multiple disorders was not completed.

Of those surveyed, 14% reported they thought the cause of their disability or limitation was related to the kind of work they performed. Given the kinds of disabilities listed, it is easy to speculate that work was responsible for considerably more than the 14% of conditions attributed to work by respondents. Multiple conditions, and the high proportion of causes in the "muscular-skeletal and nervous system" category, suggest the cumulative effects of prolonged, demanding manual labor.

The most frequently cited causal condition, skin problems (17%), is suggestive in light of the report of known exposure to agricultural chemicals by 44% of a larger subgroup of respondents. An additional 19% reported they didn't know that some pesticides, herbicides, etc., could be harmful to health. When asked if they thought such chemicals had caused an illness or health problem in the family, 29% said "yes," and an additional 19% said they weren't sure. Of those saying yes, 59% said the result had been skin problems. Other problems cited were visual problems, respiratory difficulties, digestive problems, swelling, and other unspecified "allergic" reactions.

Table 2 summarizes the impact of disabling conditions on respondents' ability to work, and their ability to live independently. The percentages given for the U.S. population are, of course, from Dr. Nagi's sample.[43]

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[43] The population base for IRA figures in Table 2 is derived from a model using sample subgroups (c), (g) and (h), such that the figures are somewhat arbitrary in the absence of more complete data analysis. Subgroup e is the base for all other descriptions of disabilities given in the preceding paragraphs. C.f. Table 1. The statistical significance of apparent differences between our sample and Dr. Nagi's sample was not calculated.

TABLE 2: FARM WORKERS ARE MORE SEVERELY DISABLED, BUT ARE MORE LIKELY TO CONTINUE WORKING*

Severity	Percent of Sample	
	Seasonal Agricultural	U.S.
Work Ability		
(a) No limitation	69	89.4
(b) Limited in work roles and activities (e.g., experiencing difficulty at work, or is temporarily unemployed, due to a partial disability	23	4.4
(c) Totally disabled (e.g., never been employed, or has had to stop working by reason of disability).	8	6.3
Total Sample	100	100.1
Ability to Live Independently		
(a) No limitation	69	88.4
(b) Limited but independent	7	6.3
(c) Mobility assistance needed (e.g., needs help going outdoors, shopping, or doing housework)	14	3.5
(d) Personal assistance needed (e.g., needs someone else to care for them on a daily or weekly basis).	9	1.8
Total Sample	99	100.0

* C.f. footnote 43

Other Characteristics

Income and Household Size

Households with disabled members reported a total earned annual income averaging $2,958. Although the upper limit of the reported range fell between $8,576 and $8,800, the distribution was skewed toward the low side, with the mode falling within the $0 to $1,000 category. Average earned annual cash income per capita was $518. (Subgroup b)

Of those surveyed, 25% of those employed reported that cash earnings were supplemented by in-kind employment benefits. The most commonly reported in-kind benefit was housing provided by employers at no or reduced cost (25%). (Subgroup h)

Interviewers said they suspected that respondents' estimates of earned income had a downward bias. Under-reporting appears attributable to unsteady earning patterns, which make it difficult to estimate total annual earning. A seasonal worker typically has several employers per year, many of whom pay cash or do not issue W-2's. Family income is often augmented by a number of irregular wage earners besides the head of house, and such miscellaneous income may also not have been fully counted, in spite of specific interview questions about it. Nevertheless, the downward bias is not universal. Many workers keep meticulous records of earnings, to help avoid being cheated by employers on payday.

Of those surveyed, 42% reported that their annual earnings were supplemented by income maintenance or support programs, such as social security, public assistance and federal aid to the totally disabled. Those who received supplements got an average of $1,925 per year. Thus, total household income averaged $3,767 per year. Average cash earnings plus other cash income, per capita, was $661 per annum. (Subgroup b)

The above findings understate actual income, partly because monetary values were not assigned to in-kind income such as food stamps, food commodities, food and clothing vouchers, and other in-kind donations. Such income was analyzed separately.

Per capita income estimates are based on an observed average of 5.7 persons per household. This figure may be low. Some respondents resisted probing for full household membership. For example, one disabled

respondent didn't want to reveal the presence of his son, daughter-in-law, and grandchildren for fear that his social security benefits might be jeopardized if survey results leaked out to authorities. The presence of extended family members in the household was common.

Individuals contributed at varying rates to total annual earned household income. During their most recent month employment, heads of households with disabled members, and the employed disabled themselves, earned an average of between $240 and $349 per month. (subgroup h.)

Tables 3 and 4 suggest that disability rates might be predicted better by income than by whether or not one is a seasonal agricultural worker.

TABLE 3: AMONG THE U.S. POPULATION, LOWER INCOME GROUPS HAVE HIGHER DISABILITY RATES

	Percent of Income Group		
Income Group	No work difficulty	Disabled or limited in work roles and activities	Total
Below $2,500	64.6	35.5	100.1
$2,500 - 4,999	81.5	18.5	100.0
$5,000 - 9,999	90.6	9.4	100.0
$10,000 - over	93.3	6.7	100.0
Missing Data	89.6	10.3	99.9

Source: Preliminary tabulations from Dr. Nagi's study.

TABLE 4: IRA's SAMPLE HAD VERY LOW INCOME*

Income	Percent of Respondents
Below $1,801	35.5
$1,801 to $2,325	12.9
$2,326 to $4,925	30.6
$4,926 to $6,375	16.0
Above $6,375	4.9
TOTAL	99.9

* Annual earned household income in 1972.

Age

The largest number of disabled respondents were between 45 and 54 years of age. Of those surveyed, 9% of the disabled were between 18 and 44 years of age (compared to 7% of the disabled in Dr. Nagi's sample). 17% were between 45 and 54 (compared to 13% in Nagi's sample). 5% were between 55 and 64 (compared to 22% of Nagi's sample). (Subgroup e.) The target population is younger than the disabled population of the U.S. as a whole.

Race and Ethnicity

Table 5 summarizes the racial/ethnic composition of the sample (group a). Especially low estimates of precision regarding its representativeness of the universe stems almost entirely from the small number of PSU's. The low estimates are consistent with Project staff's impression that Chicanos are over-represented, due to sampling error arising from location of PSU's.

Analysis for relationships of race and ethnicity to disability rates was not performed. Dr. Nagi's study found that work disability/limitation rates were 10% for Whites, 16% for Blacks, 8% for Spanish-Americans, and 3% for others.

TABLE 5: THE TARGET POPULATION CONSISTS MAINLY OF SPANISH-SPEAKING AND BLACK AMERICANS

Racial/Ethnic Classification	Percent of Sample		
	Seasonal Agricultural		U.S.
White	3		85
Black	15		11
Afro-American from Continental U.S.		15	
West Indies and Other Black		0	
Spanish-American	82		3
Chicano, Mexican-American, Spanish-American from Continental U.S. or Mexico		78	
Puerto Rican, Boricua		4	
Other	<1		1
Native American, American Indian		<1	
Filipino, Filipino-American, Japanese-American		0	
Other		<1	

Estimates of Precision for Seasonal Agricultural:

Population (@ >.95 confidence level):

Chicanos : $\pm$ 33.1%

Blacks (U.S.): $\pm$ 34.0%

Seasonal Migration

Of those surveyed, 59% of all households had one or more members who had been seasonal migrants sometime in their lives. (Group a) Within the past year 36% had migrated; 53% had migrated within the past five years.

Home base areas represented in the sample were in (by order of declining frequency) Texas, Michigan, California, North Carolina, Mexico, Florida, and Illinois. During their most recent year of migration, 74% of the respondents worked in just one state; 21% worked in two or three states; and 6% worked in more than three states.

Sometime during that year, 42% lived in migrant camps; 28% lived in cars, trucks, or buses; 5% lived in a trailer or motel; and 36% found other kinds of accommodations. (Totals more than 100% because of different arrangements used by the same household at different stops.) (Subgroup j)

Resettlement

Within the past four years, 20% of the households with disabled members had resettled outside their original home communities; 6% had also resettled at least once before within the four years prior to their most recent resettlement.

Of the disabled respondents and heads of households interviewed (subgroup f), 38% of them were currently employed at the time of their interview, and 3% held one or more part-time jobs in addition to primary employment.

Of subgroup g, 28% were considering trying to find a job or, if currently employed, a new job; 16% fit DOL's definition of "unemployed." The most widely used method of seeking employment was asking friends or relatives for information and assistance.

Respondents frequently had at least some non-agricultural work experience, although interviews did not record respondents' work histories. Of those surveyed, 14% of those who had ever been employed had non-agricultural employers for their most recent job. The remainder who had agricultural employers usually had been employed by a small grower (41%). Other frequent agricultural employers were crew leaders or labor contractors (23%) and large corporate growers (11%). Secondary and tertiary employers (from part-time jobs on the side) were generally non-agricultural. (Subgroup h)

Households with disabled members obtained an average of 73% of their annual earned income from agricultural work in the fields. (Subgroup b) They earned less income from field work in 1972 than they did in 1970. 46% earned less income, 26% earned more, and 28% earned about the same.

Of the partially disabled who held their jobs only with some difficulty, 57% had employers who were aware of their limiting conditions. However, only 18% of their employers made allowances or adjustments in work requirements in order to try to accommodate employees' problems. (Derived from subgroups c and e.)

Of those surveyed, 4% of the employed disabled respondents, and heads of households with disabled members (subgroup h) were entitled to some kind of sickness and disability benefits provided by employers, unions, insurance, or some other source. However, only one respondent reported ever having successfully collected such benefits.

Education

Formal educational attainment in U.S. schools averaged 3.4 years, among disabled respondents, and heads of households with disabled members (subgroup g). 2% had completed high school, which was the most formal education received by any respondent. 9% had between 9 and 11 years, and 89% had less than 9 years. (In Dr. Nagi's sample, 16% of the disabled had more than a high school education, 28% had completed high school, 25% had 9 to 11 years, and 31% had less than 9 years.)

Of the Chicano respondents in the subgroup, 25% reported receiving some formal education outside the United States.

Vocational Training

Of subgroup g, 18% had been enrolled in a vocational training program (other than ordinary public schooling). Of those with such training, 39% received it from government-funded manpower development and training programs, or similar public programs. 33% received theirs from private business or secretarial schools.

Completion of Education and Training Programs

A small number of respondents were asked if

they had completed the most recent education or training program in which they had been enrolled. About two-thirds said no, citing as principal reasons immediate economic pressures and dissatisfaction with program content.

Resettlement for Vocational Purposes

The disabled, and heads of households with disabled members, were asked if they would be willing to relocate permanently if that were part of a training plan that would enable them to have their ideal employment. Those surveyed, 41% said they would be willing to move to another county, but wouldn't want to leave the state; 27% said they would be willing to leave the state; 19% were unwilling to leave their home communities at all; and 14% were undecided.

Respondents not willing to relocate interstate gave the following as their main reservations: 32% did not want to leave areas where their relatives lived; 16% felt their parents would not approve. That group included respondents who were married and had their own children. 12% feared they would not like the new community. Other reasons given included being uncertain about really finding the desired employment, and not finding enough people in the new communities who spoke the same language or who shared their culture.

Language Ability and Preference

About 60% of the sample was able to speak English. This included some bilingual respondents who spoke English well enough to "give directions, seek employment, or talk to someone at the Social Security office."

27% of those who spoke English said they preferred to be counselled in some language other than English.

About 80% of the sample was able to speak Spanish. Nearly all (97%) of the Spanish-speaking named Spanish as their language of preference for counselling purposes.

When interviewed by IRA, 71% of the sample elected to be interviewed in Spanish.

Awareness of VR and Other Service Programs

The target population (the disabled and their families) appears unaware of vocational rehabilitation services. VR compared poorly with other kinds of service programs, in terms of public awareness.

The best known kinds of service programs and organizations were USDA Food Stamps, the Social Security Administration, and Local County and USDA Surplus Food Commodities programs. Results are summarized in Table 6.

Contact With Services

None of the sample had ever been in contact with a vocational rehabilitation program.[44]

Failure to contact service programs for which they were probably eligible was not due simply to lack of awareness. Of the above respondents, 19% said they knew of one or more programs that might have helped them with a problem they had, but they did not contact the program.

Disabled persons gave a number of reasons for not having received needed treatment or rehabilitation services. The most frequently cited reason (43%) was that they didn't know how to go about obtaining rehabilitation services, or that they didn't know such services were available. The next most frequently cited reason (13%) concerned some kind of fear or anxiety, such as not liking doctors or not being comfortable about receiving services from an agency. Other reasons cited were that they expected it would cost too much; they couldn't take time away from work; transportation problems; other specified kinds of inconvenience; expectations that they wouldn't qualify for available services; they didn't think they needed any services or that the condition would probably take care of itself after awhile; they were unable to ask for services because they were too sick or upset; and other reasons.

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[44] Attempts to augment the sample with randomly drawn farm workers receiving VR services proved unfeasible. Another potential source, R-300 data compiled by RSA, had only fragmentary data on farm workers. The "migrant" box was rarely checked by counsellors of farm worker clients. What data are available have not been cross-tabulated by RSA. In addition, the R-300 definition of migrant did not correspond to the definition used in this report.

TABLE 6: AWARENESS OF, APPLICATION FOR, AND RECEIPT OF PUBLIC SERVICES

Kind of Service	Percent aware of services	% of those aware who applied for services	% of applicants who received services
USDA Food Stamps	97	79	96
Social Security	76	34	38
Surplus Food Commodities	71	64	100
Union/Community Organizations of, by and for farm workers	68	19	75
Unemployment Compensation	63	42	9
Employment or job placement	57	53	56
Low-cost housing, including public housing	57	18	0
Job training	53	19	*
Aid to the blind, or aid to the disabled, including ATD	53	13	*
OEO Community Action Agencies and related programs	50	40	*
Workman's compensation	47	3	*
Aid to Families with Dependent Children: AFDC, ADC, AFDC-U	43	23	*

Table 6 (continued)

Kind of service	Percent aware of services	% of those aware who applied for services	% of applicants who received services
Programs for pensions or disability benefits paid by employers or unions	39	17	*
Veterans Administration	37	9	*
Legal aid societies and programs	32	40	*
State programs for sickness and temporary disability benefits	32	10	*
Programs for pensions or disability benefits for government employees	32	10	*
Services which help people find a home	32	10	*
Railroad retirement and disability benefits	3	0	0
Vocational rehabilitation	0	0	0

*Base too small to estimate.

Other Characteristics

Among households with disabled members, 66% had members under 13 years of age. In such households, the average number of members under 13 was 3.8.

21% of the households had additional members living with them on a temporary basis, that were not counted in the average estimated household size of 5.7 members.

Disabled respondents had experienced symptoms of their causal condition an average of eleven years. The distribution was skewed to the left, with a median of 3-1/2 years and a mode of 3 years. Conditions had limited work ability an average of 8 years, with a median of four years and a mode of one year.

Finally, some respondents were asked the following question.

> I would like you to think for a moment about all the jobs you have ever thought about for yourself. Imagine any training, education, loans, or medical treatment you could use were made available to you. What kind of work would be best for you?

Answers are not tabulated, but a reading of some of the responses yielded the following. Respondents often seemed resigned, but not content, about working as seasonal farm workers. Some were annoyed or sarcastic in response to our question or rebuked the interviewer for suggesting such an unlikely opportunity. Others said they would like to return to non-agricultural employment they had once had. Examples were carpentry and auto mechanics. The disabled often suggested work that was less physically demanding, such as inspecting produce, being a shopkeeper, or, in one case, "any kind of work that lets me stay in the shade." Our unsystematic sampling of responses revealed no one who would choose to remain a seasonal farm worker.

Factors Affecting Service Delivery

Findings presented under this heading are based primarily on observations made by VR and other agency personnel interviewed in the field. Some inconsistencies and contradictions arise from differences of opinion among respondents.

Health and Medical Services for Farm Workers

Farm workers' limited access to, and use of, medical and health services tends to reduce the number referred to VR by physicians. Target population members are less likely to seek preventative care and treatment. Physicians and hospitals tend to refuse to serve farm workers because of fear of nonpayment. Those practitioners who do treat farm workers often don't believe they should refer transient patients to VR.

Some counsellors feel that physicians also tend to cooperate less with VR when evaluating or treating a farm worker VR client. Instances of delayed and incomplete diagnostic reports for such patients were cited.

Some counsellors reported that disabled farm workers were more difficult to treat than most other clients. Treatment was even more of a problem for clients who intended to return to manual labor. Difficult-to-treat disabilities include arthritis, crippling accidents with farm machinery, and brain damage from pesticides. Multiple disorders among middle aged clients seemed to preclude return to manual labor.

Accurate medical evaluations were reported hard to obtain in many cases, because of the multiplicity of disabling symptoms, language barriers, lack of clients' sophistication about using medical services, and special diagnostic problems posed by common conditions such as back trouble and poisoning.

Referral Sources

Most referrals to VR are from agencies that generally don't serve farm workers. Examples are the Social Security Administration, public assistance programs (other than food commodities and food stamps), and educational institutions.

In some states, state employment security

commission placement workers reportedly tend to restrict farm workers to farm employment, without considering them for other employment or referring them to agencies such as VR.

Counsellors with specialized case loads (e.g., PA/VR public assistance caseloads, Social Security referrals, public offenders, high school referrals) almost never reported having farm workers on their caseloads. Except for special migrant projects, farm workers were found only among general case loads.

Some counsellors said farm workers are less likely than other potential clients to self-refer to VR. Self referrals, when they did occur, appeared to be the result of word-of-mouth information, rather than of outreach activities of VR or other service programs.

Referral sources of farm workers varied widely among different communities. Counsellors generally received very few farm worker referrals (less than ten per year), except at VR offices with special migrant programs.

Isolation from service programs that might have referred them to VR was sometimes attributed to farm workers' pride. Chicanos were said to resist being dependent; accepting services without payment was felt to be degrading.

Relations Between VR and Farm Worker Service Programs

Local programs serving migratory or seasonal workers usually do not refer disabled clients to VR. Staff there were often unaware of VR, or knew very little about it.

Local programs contacted for the study included PHS Migrant Health projects, EOA-III-B grantees, DOL "Last Yellow Bus" MDTA contractors, DOL "SER" Jobs for Progress offices, DOL-OIC projects serving migrants, community organizations, unions, and others.

What referral patterns were found had usually resulted from pre-existing friendships between a staff member and a VR counsellor. No formal referral agreements were found between VR and local programs organized to serve farm workers.

Some PHS Migrant Health projects reportedly tended to refer farm workers requiring emergency services.

A few instances of friction with migrant health projects were reported, related to which agency should bear treatment costs of clients.

Farm worker community leaders are generally unknown to VR staff. Such leaders generally told IRA they would be willing to help locate farm workers in need of VR services.

Poverty

VR income maintenance ceilings, such as maximums of $30 per week for training stipends, were said to be insufficient to support families during rehabilitation. Large family size is a factor. Farm workers are less likely to have other resources needed while a wage earner is receiving VR. This was said to contribute to high rates of failure to complete rehabilitation case plans. Rehabilitation was likely to be disrupted if a partially disabled wage earner found a harvest or other short-term job opportunity, or if other household members found work requiring migration.

In addition, income maintenance costs are much higher per case than other types of training costs. In most offices, income maintenance was not budgeted separately from other training expenses. Consequently, counsellors were reluctant to spend limited training monies to meet clients' income needs on any prolonged basis. Several counsellors were proud of their reputations for keeping costs per case low, thereby spreading training funds among more clients.

Other locally available income maintenance programs often were unwilling to serve target clientele. To the extent that such resources existed, they were often under-utilized. Examples were given of state/county welfare agencies resorting to a variety of bureaucratic procedures to delay and cancel AFDC benefits for farm worker VR clients every time a local harvest season rolled around.

Differences Between Farm Workers and VR Staff

Few counsellors felt there was a disproportionately high need among farm workers for VR services. Most counsellors interviewed did not appear interested in increasing the proportion of farm workers on their case loads.

Some counsellors insisted that farm worker cases were just as easy as others, posing no special problems. Other counsellors felt that farm workers were typically more difficult to work with.

Counsellors with cultural backgrounds similar to that of their farm worker clients tended to see such cases as being more complex and difficult to serve satisfactorily.

There was a need for more bilingual staff. Some felt that Spanish-speaking counsellors were needed, while others maintained that all they needed were translators. A few maintained they could communicate satisfactorily by gesturing, etc.

Some described farm workers as tending to be undependable or irresponsible. Such counsellors sometimes struck IRA staff as showing other signs of being especially uninformed about the special needs and characteristics of farm workers.

Some counsellors felt that the client's practice of speaking Spanish at home was a liability that impaired vocational potential.

Some reported that migrants' transient lifestyle impaired their rehabilitation potential.

Often farm workers were reported to be superstitious or fearful of doctors. Other counsellors found fault instead with doctors' treatment of farm workers.

A few counsellors resented programs for migrants, saying that not enough emphasis was being placed on other needy populations.

Some felt that farm workers lacked sufficient employment motivation. A few Spanish-speaking counsellors, on the other hand, felt that migrants were often better motivated than other clients. Some felt that settling out adversely affected the motivation of some farm workers, particularly if settling out increased dependence upon public assistance programs.

Some counsellors criticized colleagues' attitudes towards farm workers. A few reportedly considered length of local residence to be an eligibility factor.

Some counsellors considered minority group culture to be a "socio-behavioral handicap."

Limited Vocational Options for Farm Workers

Lack of even a grade school education was said to severely limit the rehabilitation potential of target clients. This was said to be especially true of older clientele.

It was said to be difficult for target clients to leave seasonal agricultural work to accept alternative employment when that meant leaving a way of life, with associated friends, neighbors and co-workers who shared a common language, culture and identity.

Target clients who left agriculture often ended up being dependent upon some social service or income maintenance agency.

Inadequate grasp of spoken and written English was said to be the most frequent barrier to employment outside of seasonal agriculture.

Simple physical restoration and return to farm work was the most frequent objective for farm worker cases. Hernia and hemorrhoid repairs were especially frequent.

Counsellors rarely felt that decreasing employment and earning opportunities in seasonal agricultural work was a problem. Few counsellors were aware of the trend at all. A few felt that farm workers ought to be encouraged to remain in farm work until they were completely displaced by machines. Some counsellors may have been influenced by public statements of local growers' associations concerning their "need" for more seasonal labor.

Some counsellors reported that the independence and work habits associated with agricultural labor left farm worker clientele especially unprepared for the more regimented patterns of commercial and industrial employment. Special training emphasizing punctuality, employer relations, etc., was recommended.

Nearly all counsellors considered return to seasonal agricultural work to meet the VR definition of rehabilitation. This was in spite of the sporadic nature of farm work, such that the "rehabilitated" client might not be employed the required 60 or 90 days following completion of the treatment plan.

Some counsellors routinely restrict the number of training options considered for farm worker clientele. E.g., "Unless English is spoken in the home, I don't send them to Court Reporting School. . . . It's been proven too many times that when Spanish is spoken they bomb out."

There was frequently an unmet need for adult basic education classes (ABE). This was especially true of classes for the Spanish-speaking, along with bilingual and bicultural education programs, and programs for learning English as a second language (ESL).

Local projects to retrain farm workers, with referral, training, and placement services, were rarely contacted or used by VR counsellors. Some counsellors criticized such programs as being unsuitable for the disabled, of poor quality, encouraging dependence with excessive stipends, allowing re-enrollment, etc.

Geographic Isolation and Mobility

In user areas, migrants were less likely to be referred to VR than other seasonal farm workers.

Counsellors in user areas are limited in the amount of services they can provide migrants, because of the short time their clients remain in the area.

Both migrant and non-migratory farm workers are often isolated from telephones, public or personal transportation, and even mail in some cases. (Illiteracy, language differences, and suspicion of envelopes imprinted with official agency letterheads also impede communication by mail.) Many depend upon employers, crew leaders, or working family members for transportation.

The better rehabilitation facilities are said to be in urban areas, far from farm workers' homes. Many farm workers were said to be reluctant to leave their communities or families in order to receive treatment or training. Cultural norms sometimes prohibit leaving unmarried daughters on their own, unless in the care of a relative. Norms also sometimes require that family members accompany anyone who is hospitalized.

Normal Waits and Delays in the Rehabilitation Process

VR was often said to respond too slowly to client needs. Some counsellors believe that low income clients, who have less confidence in the agency to begin with, are more likely to lose interest or change their minds about rehabilitation plans during waits or delays. Examples of such waits and delays include waiting for physicians who are slow to schedule examinations, waiting for physicians to submit reports, waiting for approval

of income maintenance requests, waiting for the next session of a training program to start, and waiting for next year's allocation of training funds.

Waits and delays are particularly difficult for seasonal workers, who must interrupt everything to help the family in the fields when earning opportunities arise. Members of migratory families are frequently obliged to leave the area in the middle of the case plan if the case cannot be completed before the next migration season. Families often cannot afford to accommodate rehabilitation plans during seasonal work periods.

Agency Priorities and Incentives for Counsellors

Many counsellors report that it is more difficult to achieve a successful closure (status 26) for farm worker cases. The successful closure rate is usually said to figure in employee evaluations and promotions. However, no counsellors admitted exercising lattitude in eligibility determinations to avoid serving farm workers.

The closure reporting system does not recognize varying levels of effort per case. More modest, less costly, shorter term rehabilitation plans are thereby encouraged. This appears to encourage counsellors to return disabled farm workers to seasonal agricultural employment, rather than undertake more ambitious rehabilitation plans for alternative occupations.

Rehabilitation of farm workers for other employment is reported to be much more difficult and time-consuming for the counsellor, and more costly for his agency, compared to rehabilitation of other better educated and more advantaged clientele. Such case plans for former farm workers reduce the counsellor's total case load capacity, thereby affecting closure rates.

Migratory clients who must be transferred to a counsellor in another community or state prevent crediting a status 26 to the originating counsellor. Many counsellors consider migration to indicate limited rehabilitation potential.

Pressures to keep average costs per case low work to discourage counsellors from developing vocational options requiring basic education and extensive training for farm workers. One source of such pressure is agency guidelines and spending ceilings, reinforced by supervisory practices and informal staff norms. Another source of

such pressure is the counsellor's desire to serve as many clients as possible with limited allocations of training funds.

A few instances were reported of supervisors encouraging Spanish-speaking counsellors to accept up to one-third of their caseloads with farm workers. It was understood that resultant reduced closure rates would not adversely affect the counsellor. In at least one instance, the counsellor already had an above-average closure rate.

Informal procedures or guidelines for choosing among referred persons eligible for VR (given limited agency resources) were not revealed. Official agency policy of first-come, first-served was frequently cited. However, references to counsellors' discretion were also made.

Most counsellors estimated that many or most persons in the community eligible for VR would not receive it. This was attributed to limited agency resources and outreach. Except for new employees, all counsellors felt their caseload was up to capacity, at least.

Many counsellors seemed proud of the number of difficult rehabilitations they had achieved, in spite of agency incentives to work with easier cases. Some reported resorting to "creaming" to compensate for the amount of time spent on difficult rehabilitations. Rehabilitations of farm workers for other occupations were among some of the difficult cases mentioned. ("Creaming": Accepting and taking credit for clients that probably had not needed VR services in order to find gainful employment.)

Tests Used for Vocational Evaluations

Standardized diagnostic techniques lack validity for farm workers, according to many counsellors. Language barriers and illiteracy were only part of the problem. Some farm workers reportedly scored below zero on a vocational aptitude test.

A few counsellors accepted test scores at face value, even when scores failed to indicate any vocational potential. Other counsellors continued to use such test scores, because better assessment techniques were unavailable.

Available Psychotherapy

Language differences impeded treatment of clients with mental or emotional disabilities. The practice of some treatment professionals of using lay translators may have impaired treatment.

Treatment professionals reportedly did not successfully take into account cultural differences between themselves and farm worker clients, according to some counsellors. An example cited was that of a psychiatric consultant to a rural VR office who was trained in New York, and who consistently diagnosed Chicana women referred to him as being "sexually repressed."

Current VR Programs for Farm Workers

During IRA's research, RSA had funded three grantees with programs specifically intended to serve disabled migratory farm workers. Those were the Arizona Job College; a multi-service center in Nyssa, Oregon; and a counselling and pre-vocational training program in the Rio Grande Valley of Texas.

After IRA's research was completed, new funds were made available under subsection 304(c) of the Rehabilitation Act of 1973. Grants are presently administered by five Assistant Regional Commissioners' offices. Grantees reportedly are nine different state VR agencies: California, Florida, Idaho, Oregon, New Jersey, New York, Texas, and Wisconsin. Early estimates are that first-year spending by grantees will exceed the $685,000 minimum required by law. Grants typically have three-year commitments.

Arizona Job College

The Arizona Job College (AJC) in Casa Grande is a residential rehabilitation and training center for families which include agricultural workers. AJC is described as providing a relatively intensive approach to family rehabilitation.[45] It provides a rehabilitation

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45 Betty Murphy, Arizona Job College: Defeating the Dependency Syndrome (Office of Economic Opportunity: Washington, D.C., June 1972), p. 5.

milieu as well as a comprehensive range of specific counselling, training and treatment services. It also treats families' dysfunctional attitudes and traditions not suited to rehabilitation objectives.

Pre-Vocational Training for Handicapped Migrants

The Texas Rehabilitation Commission (TRC) office located in Pharr was the site of a demonstration-expansion project to improve effectiveness of VR services to migrants. The office was located centrally in the Rio Grande Valley, which comprises the largest migrant home-base area in the nation. The Pharr office, even before the project, had significant numbers of target clientele, although not necessarily all migrants. The service area of the office has a population which is over 85% Spanish-speaking, and has over 50% of its population eligible for OEO services by reason of low-income. The main employer is agriculture and related industries, and much of the employment is seasonal.

The project involved two bilingual Chicano counsellors who specialized in migrant cases referred through normal channels. (Many of the other counsellors in the office, and all of the supportive staff, were also bilingual.) In addition to the training resources normally available to all the counsellors, the migrant specialists were able to refer migrant clients to pre-vocational training classes taught by Spanish-speaking instructors employed for that purpose by TRC. The classes were said to include instruction in grooming and appearance, attitudes and work habits, along with other fundamentals.

There was conflicting information about whether the project was still funded exclusively for migrants at the time of the interviews. In any case, staff interviewed tended to feel the program should be available at least to all low-income Spanish-speaking clientele, rather than just migrants. The wider population they wished to serve generally conformed to the operational definition of the target population used by this IRA Study. In any case, the project's narrower definition of "migrants" did not appear to be rigidly applied in actual practice.

IV. CONCLUSIONS

Some Common Characteristics of Disabled Farm Workers

Disabled seasonal agricultural workers appear likely to be either suffering from a work accident, or from the multiple cumulative symptoms of a career of manual labor. The former is likely to involve farm machinery mishaps, falls from ladders, poisonings, and other such accidents.

Middle-aged and older workers showing cumulative symptoms may often be more difficult to treat. Some clients simply need a hernia repair. But a disproportionate number of disabled farm workers suffer from a combination of problems such as arthritis, vaguely defined back and leg pains, and high blood pressure. Clients' lack of medical sophistication, plus language differences, will likely impede thorough diagnosis and treatment.

Disabled women often have the same problems. Others are troubled by hernias and other effects of their above-average number of pregnancies and untreated complications at births. They are also more likely to describe themselves as being in need of psychotherapy or counselling, provided conventional stigmas are avoided.

Other disabled, irrespective of age, are limited by the effects of untreated congenital and other chronic health problems. The effects of prolonged isolation from health and medical services are manifested in a variety of problems, including unmet needs for eyeglasses and dental work.

Handicapped farm workers are usually not totally disabled. However, their productivity as manual workers is sufficiently impaired to substantially reduce earning capacity.

An alert and skillful counsellor may often discover other partially disabled household members in addition to his farm worker client. IRA's respondents were found more likely to conceal disabling symptoms than to feign them.

A target client will almost always be poor, by both OEO standards, and usually also be USDA Food Stamp and AFDC eligibility standards. Clients are likely to have received USDA Food Stamps or surplus food commodities distribution services. The client is not likely to have received any other services. Part of the reason is ignorance of programs for which he is eligible. Other frequent reasons are legislated exclusions from eligibility, discrimination due to local community attitudes, the client's pride or distrust or anxiety, and employer pressure not to seek services.

Partial disability, and low household income, together tend to discourage completion of rehabilitation services. Families often can ill afford to lose the services of one of its wage earners, regardless of the amount earned. Treatment and training may not only mean short-term loss of wages from the client member, but disruption of work schedules of other members as well. Providing transportation to appointments, standing traditional vigil at far-away hospitals during inpatient treatment, and delay or cancellation of migration itineraries, all threaten to wreak additional economic hardships on families that have little or no reserves. Rehabilitation programs appear to have begun in many cases without families fully realizing at the outset the amount of time and personal costs involved.

Depending upon the locality, there is a very good chance that the client's primary language will be Spanish. Of those who speak Spanish, 50% of those speak little if any English. Those who do speak English may not be sufficiently proficient in English for effective counselling.

It is common for target households or members to permanently move away from their home communities or home base. A frequent pattern is re-location from the South to some northern community, close to both agriculture and industry, perhaps close to relatives, or near a site where one used to work as a migrant.

Recently re-located or settled-out families frequently have family members who are highly motivated, but are experiencing overwhelmingly difficult adjustment problems. Work may be harder to find than expected, the cost of living may be higher, the weather colder and fuel bills higher. Housing may be hard to find, and the local community may have hostile elements. Sometimes parents or relatives back "home" are depending on the resettled family for income. Attempts to settle

out "upstream" often fail, in spite of greater earning opportunities than in southern home bases. Relocation attempts are sometimes repeated.

The target client frequently has very limited qualifications for commercial and industrial employment. However, he may not be as limited as conventional measures suggest. For example, the client with a fourth-grade education, limited English ability and no formal vocational education, might nevertheless have the aptitude and basic skills needed to be an excellent engine mechanic. While unable to read manuals or receive instruction in a GM diesel certification program, he might have had extensive experience supplementing agricultural earnings by overhauling neighbors' automobile engines. If asked by a counsellor to list his previous employers, he probably wouldn't mention that experience.

His limited education shouldn't suggest limited intellectual potential. More likely it represents the combined result of economic pressures and family beliefs during childhood, and lack of encouragement or outright discrimination by school officials.[46] Immigrants may have received some education outside the United States.

The counsellor may need to look into unfamiliar job markets in order to rehabilitate a farm worker. The target client may have potential for permanent, full-time agricultural employment. Agricultural mechanization has been creating new kinds of jobs requiring training. Training agreements might be explored with corporate agricultural producers and universities which have been spearheading the movement toward mechanization. Other occupations should be explored. For example, agricultural inspectors, although seasonally employed, are often well paid.

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[46] U.S. Commission on Civil Rights, Mexican-American Education Studies: Report: Ethnic Isolation of Mexican-Americans in the Public Schools of the Southwest.

Barriers to Successful Rehabilitation

Disabled farm workers are relatively unlikely to come in contact with VR services. Those farm workers who do become VR clients tend to benefit less from VR services.

Successful closure of farm worker VR cases can be variously defined. Most counsellors with farm worker clients define successful closure in terms of "status 26" requirements, in which the client is placed in satisfactory employment lasting beyond some specified time. Some counsellors report that farm worker client cases are less likely to achieve status 26 closures.

Use of the status 26 criterion may mask lower degrees of success with farm workers than with other VR clientele. Counsellors report that most farm worker clients achieving status 26 have been provided with medical treatment or restoration services, and then returned to farm work without receiving vocational training or related services. The client reportedly accedes easily to plans to return to farm work. However, farm workers sampled by IRA would have preferred to pursue a different vocation.

Clients who actually prefer to return to farm work are usually unaware of labor market trends in agriculture. Recent projections suggest continued shrinkage of the seasonal labor market due to crop mechanization and other labor displacing technology. If a counsellor doesn't explore alternative training and vocational plans for the disabled farm worker during case planning, he might be doing his client a disservice, in spite of the client's stated preference for farm work. Development of vocational alternatives is often made very difficult by farm workers' needs for basic education and other long-term training. But both

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counsellor and client often fail to realize that return to farm work will mean increasing unemployment, underemployment, and shrinking individual earnings.

Successful rehabilitation is a matter of degree, as opposed to the "all or nothing" character of status 26. If the status 26 closure rate for farm workers were known, it might exaggerate the effectiveness of VR services provided such clients, relative to other VR clientele. In any case, closure data on farm workers cannot be derived from available case records.

Special characteristics of the farm worker population, leading to disparities in VR service delivery and effectiveness, are summarized in terms of ten "barriers" to successful rehabilitation.

1. Inadequate health and medical services for migratory and seasonal agricultural workers. Farm workers' limited access to and use of medical and health services tends to reduce the number of referrals by physicians to VR. Some counsellors feel that physicians also tend to co-operate less with VR when evaluating or treating a farm worker VR client.

2. Lack of other agency services for the target population. Although farm workers are eligible for a number of service programs, they are less likely to make contact or receive services from agencies that normally refer to VR.

3. Lack of interagency referrals between VR and organizations providing services to the target population. Programs serving primarily farm workers have little or no contact with VR, even though referral, training, treatment or placement agreements could be developed. Examples found were PHS Migrant Health projects, EOA-III-B grantees, DOL "Last Yellow Bus" MDTA contractors, DOL "SER" Jobs for Progress offices, DOL-OIC projects serving migrants, community organizations, unions, and others.*

4. Lack of financial resources among the target population to absorb rehabilitation costs. The average annual earnings of the households with disabled members in IRA's sample was $2,958, yielding a per

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* DOL (U.S. Dept. of Labor) programs for farm workers have since been reorganized, and some have been discontinued.

capita earned income of $518. The average total annual household income was $3,767, the difference being provided by income transfer payments programs such as AFDC, and miscellaneous sources. (In-kind employment benefits, and voucher subsidy programs such as food stamps, are excluded.) Participation of a family member in a VR plan typically imposes special costs on the farm worker household, principally in the form of lost wages by the client and others who provide the client's transportation or forgo migration during rehabilitation. Temporary loss of the client's services in the home (e.g., child care) are among other such costs. Ignoring such costs during case planning may contribute to farm worker clients' high attrition rate.

5. Language and cultural differences between the target population and VR staff. Insufficient understanding between counsellors and farm worker clientele is suggested by high attrition, and by discrepancies between IRA survey findings and counsellors' impressions of clients. Most counsellors of farm workers are unable to speak those clients' native language. 80% of the farm workers interviewed by IRA spoke Spanish, and 40% spoke almost no English. Counsellors' lack of information on farm workers' social, cultural, employment and financial background appears to impede successful rehabilitation.

6. Shortage of appropriate training programs for target clientele. Formal education of farm workers sampled averaged 3.4 years. 2% had high school diplomas. Appropriate training resources were lacking in communities with local concentrations of farm workers. Needed resources include bilingual adult basic education programs, other bilingual-bicultural instruction, programs teaching English as a second language, and pre-vocational instruction concerning conventional work habits and employment norms in non-agricultural industry and commerce.

7. Geographic isolation and mobility of the target population. The farm worker population is frequently distributed along rural farm roads, or concentrated in rural colonies, or residing in temporary field camps. Disabled farm workers frequently do not have access to personal or public transportation. The immediate financial needs described above, along with high unemployment rates at home base areas (estimated at 16%), encourage seasonal migration in search of work. Migration is likely to occur even at the expense of service delivery continuity and associated long-range benefits.

8. Normal waits and delays in the rehabilitation process. Cases which last into periods of seasonal employment are more likely to be lost, particularly if training or treatment is not actually in progress when the season starts. This is especially true of households that must migrate in order to find seasonal employment.

9. Administrative disincentives for maximum rehabilitation of target clientele. Counsellors generally are quite aware of federal and state agency interest in recording the most rehabilitations per unit of agency expenditure. Counsellors strive to maintain favorable status 26 closure rates, and to limit the average direct cost expenditure per case by their agency. The impact of those incentives on recruitment of disabled farm worker clientele, and on eligibility determinations for farm workers, is not clear. Some counsellors do believe farm workers to be more difficult to rehabilitate in terms of status 26 requirements. Local social attitudes and interagency relationships also appear to discourage or prevent some counsellors from serving disabled farm workers.

Case planning for eligible farm workers is clearly affected by counsellors' cost consciousness. Counsellors usually perceive the only feasible vocational objective to be return to farm work. More ambitious training plans are often felt to be prohibitively costly, given farm workers' limited formal education and other special characteristics. Counsellors' decisions to rehabilitate clients by returning them to the fields are sometimes encouraged by other factors, such as misinformation about the farm labor market, misunderstanding of clients' aspirations, lack of suitable training resources, local social attitudes, and difficulties in counselling farm workers.

10. Limits of resources offered by the behavioral sciences and psychotherapeutic arts. Psychometric diagnostic instruments frequently are not valid for vocational evaluation of farm workers. Also, 12% of the disabled in IRA's sample reported emotional or related problems; farm workers' culture and language make treatment difficult.

Policy Considerations

Target Population Priority-- Present VR policy is that farm workers are just as entitled to VR services as other people, and that farm workers are evaluated and served on an individual basis without special consideration of their farm worker status. However, the state/federal VR program has not generally accommodated the special needs of disabled farm workers, and service delivery barriers to farm workers have resulted. Congress has shown some interest in the special needs of disabled farm workers, but no clear mandate presently exists to provide equitable VR service delivery to them. IRA did not explore any possible legal implications of present service delivery disparities. It appears that the relative priority of disabled farm workers is an issue that remains to be settled.

Present VR emphasis on serving severely disabled clients could either enhance or hinder services to the farm worker population, depending upon how severity were defined. However, emphasis on the severely disabled is unlikely to increase services to farm workers, unless accompanied by a program to reduce the service delivery barriers described above.

Eligibility Requirements-- Counsellors uniformly state that a client is eligible for VR if he has (1) a disability which (2) poses a substantial handicap to employment, and (3) the client is likely to achieve gainful employment as a result of VR services. Interpretation of eligibility requirements varies from case to case and from counsellor to counsellor. 74% of the disabled heads of household in IRA's sample were partially disabled; i.e., their productivity in the fields was substantially limited by a disability, but they continued to engage in field work. At least some counsellors already consider such disabilities to qualify under provision (2), above. IRA used that interpretation when estimating the number of farm workers eligible for VR.

Farm Worker Status-- Presently migrating field workers constituted a subgroup within IRA's sample. The remainder of the sample consisted of other kinds of seasonal agricultural workers or members of their immediate households. Included were migrants and others who were currently unemployed in agriculture, but had engaged in seasonal work within the last five years. Practically all were low income.

The above-average disability rates, and the special population characteristics related to VR service delivery barriers (except mobility) characterized the entire sample. Non-migrant farm workers included in IRA's sample need special VR services just as much as migrants do (except for accommodation of seasonal mobility). The proportion of the target population that is not currently migrating may increase as crop mechanization increases.

Defining Rehabilitation-- Given seasonal agricultural labor market shrinkage, the long-term earning potential of many farm worker clientele might be higher if they were trained for other vocations, instead of being rehabilitated to return to farm work. In such cases, VR can offer different degrees of rehabilitation, which the current status 26 statistics do not measure. Increased VR emphasis on preparing farm workers for other occupations would be more consistent with current DOL farm worker program priorities.

Services to Non-Disabled Family Members-- Increased family counselling, referrals of family members to other services, and involvement of the family in client rehabilitation and planning, all might work to reduce attrition and unsatsifactory closure rates. Current legislation allows transportation expense reimbursement and other services to non-disabled family members, at least for farm workers served under special migrant (304) VR monies. The legislation appears ambiguous about whether income maintenance and training services might also be extended to non-disabled members of a disabled farm worker's immediate family. Such a policy would enhance the long-term benefits of VR to the disabled farm worker client. The policy might also reduce case attrition, and increase the likelihood of successful rehabilitation of the disabled farm worker client.

Financing Programs to Reduce Service Delivery Barriers-- Expansion of VR services to farm workers could be accomplished either through reallocation of existing general program monies spent by certain state VR agencies, or by providing special purpose grants or other earmarked "90-10" grants. While some states have made an effort to hire more Spanish-speaking counsellors, voluntary reallocation of general program monies by the states appears unlikely.

The most feasible funding mechanism appears to be federal grants under section 304 of the Rehabilitation Act of 1973. RSA could reallocate 304 monies, to

increase grants authorized by sub-section 304(c). Given present authorization, and assuming future appropriations at least at present levels, RSA may allocate up to $5,000,000 per year for 304(c) grants to states. This compares with $735,000 actually allocated by RSA for this purpose in FY 1974. (The legally required minimum allocation is $685,000.)

Congressional action could increase the amount of 304 money RSA is required to spend under 304(c), if they increased the presently required 5% earmarking level. A general increase in 304 appropriations would, of course, also increase minimum required spending under sub-section 304(c). However, to be most effective, the initiative to expand 304'c) services to farm workers probably needs to come from within the Administration itself.

State 304(c) grantees might be induced or required to continue farm worker service projects with general program monies, following termination of the 90-10 grant period. This and other aspects of a national expansion effort might be better accomplished if 304(c) grants were administered and monitored centrally by a program specialist in Washington, D.C., instead of being delegated out to Assistant Regional Commissioners' offices.

Policy Recommendations

The following recommendations assume that cost-effectiveness and equity considerations would make increased rehabilitations of handicapped farm workers a desirable goal, given present levels of appropriations to RSA and state VR agencies. Further study to test that assumption is recommended.

Recommended Federal Policy

Numerical goals for farm worker case closures should be set for state VR agencies, based on the national farm worker population distribution. Farm workers with partial disabilities should be included within existing eligibility criteria. Farm workers would be defined to include any members of a household in which someone had engaged in seasonal agricultural employment within the past five years, subject to household income restrictions.

Emphasis should be placed on vocations enabling client households to settle out of the seasonal work force. Continued emphasis should also be placed on farm workers with no feasible potential for other vocations, provided that such unfeasibility is clearly established by careful investigation of vocational alternatives.

Non-disabled members of disabled farm workers' households should be held eligible for a variety of VR-provided services, including family social work, referral to other services, income maintenance, training, placement, and relocation assistance. Legislative research and possible action may be required to enable provision of such services. Training and placement services to non-disabled family members may not be clearly authorized by existing law. Possible use of VR funds (other than those authorized under section 304(c)) for family services in general also needs to be reviewed in light of current legislation.

Suggested Objectives for RSA

1. Provide central co-ordination of grants to expand services to farm workers, using the services of a qualified program specialist.

2. Adjust incentives implicit in the present R-300 reporting system, to encourage states to expand services to farm workers.

3. Provide training and technical assistance services to states undertaking projects to expand service delivery to farm workers.

4. Facilitate interoffice and interstate case-work services.

5. Encourage colleges and universities to recruit qualified minority students for training as rehabilitation counsellors.

6. Evaluate various expansion strategies undertaken by 304(c) grantees, and disseminate findings and implications for practice to affected state agencies. Add to the variety of strategies tested through additional research and demonstration activities.

7. Designate personnel to refine and recommend action on the policies and service delivery system recommended herein.

Suggested Objectives for State VR Agencies

1. Establish research and demonstration priorities to test strategies to expand services to disabled farm workers.

2. Establish a general priority for expanding services, including numerical goals based on population patterns of farm workers.

3. Collect case statistics specifically concerning services to farm workers.

4. Develop special personnel policies, training and recruitment programs, to develop agency ability to rehabilitate farm workers.

5. Develop a state planning unit to plan local service units serving local farm worker populations.

6. Budget funds specifically for training and other case expenses of farm workers, dispersed separately from other funds.

7. Develop advisory structures to assist with planning and overseeing service delivery to farm worker communities.

A Service Delivery System for Farm Workers

The following elements of a service delivery system are proposed for RSA's consideration and further study. The plan assumes that the preceding policy recommendations would be adopted by RSA.

The system would be national in scope. It would consist mainly of units within selected state VR agencies. In addition, there would be a unit within RSA, a group of Outreach Units operated by local farm worker service organizations, and a national telephone referral unit.

The system would be financed initially by a centrally co-ordinated series of grants authorized under

subsection 304(c) of the Rehabilitation Act of 1973. Grant awards would be contingent upon commitments by state agencies to continue their projects with general program monies after grant funds ran out. Other sources of funds might be required to support the RSA unit and the national telephone referral unit, depending upon interpretation of existing legislation.

RSA Farm Worker Unit

Functions of the unit would include the following:

(a) Solicit and process applications, and award grants to state VR agencies, to initiate participation in the farm worker service delivery system.

(b) Solicit and process applications, and award grants to local farm worker service organizations, to function as Outreach Units.

(c) Monitor and evaluate grantee performance, and renew grants accordingly.

(d) Provide information and technical assistance services to grantees and other qualified disabled farm worker service projects.

(e) Co-ordinate with other federal programs and agencies.

(f) Recommend program and policy modifications, including legislative modifications.

The unit staff would include a qualified farm worker program specialist. Technical assistance and field evaluation services would be contracted out to the extent required.

State Planning Unit

Functions of the unit would include the following.

(a) Plan and conduct feasibility studies to establish Local Service Units for disabled farm workers.

(b) Develop service co-ordination agreements with local farm worker service organizations to operate Outreach Units.

(c) Develop grant applications for Local Service Units and Outreach Units.

(d) Hire and train Local Service Unit staff.

(e) Promote development of local, regional or state training resources for disabled farm workers, to the extent such resources are lacking for Local Service Units.

(f) Monitor and report on activities of Local Service Units.

Local Service Unit: User/Settling-out Sites

User/settling-out sites are typically rural and semi-urban areas where the agricultural work force is augmented by seasonal migrants from other areas. Included would be northern and midwestern states (e.g., Michigan, New Jersey, Oregon, and others), as well as certain regions within some southern and western states (e.g., California, North Carolina, Texas and others). (C.f. Appendix A.) At user sites, most of the target population resides there temporarily, anywhere from a couple of weeks to a couple of months or more. Often, some of that transient population attempts to settle out of the migrant stream, to become permanent residents of the user area. Functions of the Local Service Unit would include the following.

(a) Increase referrals of disabled farm workers to local VR offices.

(b) Accept or assist with cases in progress referred by VR offices in other communities or states.

(c) During peak population seasons: provide evaluation and initial case planning or counselling services to recently referred farm workers.

(d) During peak population seasons: provide limited short-term treatment services, to the extent that clients' immediate earning opportunities are not impaired.

(e) During peak population seasons: provide referrals to VR facilities in migrants' home base communities, or in communities along major stops in migrants' seasonal itineraries.

(f) During peak population seasons: explore with transient farm worker clients the possibility of settling out locally, as part of an alternative case plan.

(g) Immediately after peak population seasons: provide short-term treatment services to transient clientele willing to delay leaving; provide referrals to VR facilities in migrants' home base communities, or in communities along major stops in the itinerary, to provide for follow-up vocational training and placement services.

(h) During off-seasons: provide counselling, planning, treatment, training, and social services to settling out and other local seasonal agricultural workers and their families.

(i) During off-seasons: promote development of needed training facilities for disabled farm workers, in co-ordinataion with other community elements.

Outreach, recruitment, evaluation and social services would be delivered in co-ordination with an Outreach Unit. The Local Service Unit would be staffed by especially qualified and trained VR counsellor(s). Social services would be provided by an especially qualified and trained social worker, either on staff or on consultantship, or on the staff of the Outreach Unit. The counsellor would be housed reasonably close to the target population, probably at either a VR office or at the offices of the Outreach Unit. Qualified receptionist services would be provided. The counsellor(s) would be supervised both by the local VR supervisor and by the State Planning Unit. The Local Service Unit would have a special budget for training and income maintenance expenses of farm worker cases.

Local Service Unit: Home Base Sites

Home base sites have both non-migrating seasonal workers, and migrants who stay at home during off seasons. Major home bases are located in Arizona, California, Florida, New Mexico, Puerto Rico and Texas. Settling out of seasonal farm work in home bases occurs two ways: alternative local employment is found, or the household (all or part) out-migrates permanently to another community with the hope of finding employment. Home bases are characterized by high structural unemployment and poverty. Functions of the Local Service Unit would include the following.

(a) Increase referrals of disabled farm workers to local VR offices.

(b) Accept or assist with cases in progress referred by VR offices in other communities or states.

(c) During local work seasons: provide evaluation and initial case planning or counselling services to farm worker referrals.

(d) During local work seasons: provide limited short-term treatment services to the extent that immediate earning opportunities are not impaired.

(e) During off-seasons (e.g., certain winter periods): provide counselling, planning, treatment, training, and social services to migrant clientele while they are at home and out of work.

(f) During periods of seasonal out-migration: provide such services to non-migrating farm worker clientele.

(g) During periods of seasonal out-migration: promote development of needed training facilities for disabled farm workers, in co-ordination with other community elements.

(h) To the extent that needed training facilities will not be provided otherwise, work with the State Planning Unit to develop VR-operated training programs well suited to the needs of disabled farm workers. (E.g., pre-vocational training.)

(i) Co-ordinate with VR offices in other communities or states, to arrange training or placement for clients wishing to out-migrate permanently.

Administrative arrangements would be similar to those for units serving user/settling-out sites.

Outreach Unit: Local Farm Worker Service Organizations

The Outreach Unit could be operated by a local migrant service agency or incorporated community organization, or by the local VR office. The former would likely require lower costs per case, and would provide a useful degree of flexibility in promoting locally-needed training facilities for disabled farm workers. Functions of the Outreach Unit would include the following.

(a) Preliminary screening at farm worker population sites to detect farm workers apparently eligible for VR services.

(b) Preliminary information and counselling services to apparently eligible farm workers.

(c) Authorization and arrangement of medical evaluations of apparently eligible farm workers.

(d) Referral to the Local Service Unit.

(e) Provision of transportation services as needed.

(f) Optional: provision of social services and family counselling and referral services, in co-ordination with the Local Service Unit.

(g) Optional: provision of evaluation and, when authorized by the Local Service Unit, selected treatment services. (E.g., the Outreach Unit might be operated by a PHS migrant health project grantee.)

(h) Promotion, advocacy, or organization of needed training resources suitable for disabled farm workers.

The Outreach Unit activities would be coordinated closely with those of the Local Service Unit. Numerical goals would be set on an annual or seasonal basis for case referrals and evaluations, subject to the approval of the State Planning Unit. Basic grants would be awarded by the RSA Farm Worker Unit in conjunction with grants awarded the state VR agency. The state VR agency grantee would provide additional support for the Outreach Unit. State support would be on a cost-plus-fee-per-case basis, up to a set maximum. Outreach Units, whether operated by a local private non-profit organization, another agency, or the VR agency itself, would be required to have a policy board with a fixed minimum proportion of farm workers. That board would also be advisory to the Local Service Unit.

National Telephone Referral Unit

The unit's staff would include especially qualified and trained counsellor(s). Inward and outward wide area telephone service (WATS) would be maintained, with one telephone number disseminated nationally to all farm worker clientele through their counsellors. The grantee operating the unit could be one of the participating state agencies. Functions of the National Telephone Referral Unit would include the following.

(a) Assist farm worker VR clients in re-establishing service delivery, particularly after they have relocated.

(b) Assist farm worker VR clients in obtaining short-term non-VR services from agencies in their area during crises while in transit. (E.g., emergency food and medical service referral.)

(c) Provide follow-up services for such referrals, with the assistance of VR staff in the client's area.

(d) Compile and maintain a national referral directory of VR offices, also identifying Local Service Units and Outreach Units of the farm worker VR service delivery system.

(e) Compile and maintain a directory of emergency and other non-VR services for farm workers (based on information obtainable from the Juarez-Lincoln migrant program and other programs and agencies).

(f) Regularly disseminate updated directories to Local Service Units and Outreach Units of the farm worker VR service delivery system.

(g) Assist counsellors in maintaining follow-up contact with farm worker clients.

Recommended Counselling Practices

Training of counsellors serving disabled farm workers should cover the following points and suggestions. These are based largely on recommendations from a number of counsellors interviewed for this study. Some of these may strike counsellors as general principles applicable to other clients, too. The reader should remember, however, that each of these recommended practices is especially important when counselling farm worker clientele.

1. Become familiar with the local seasonal farm worker population, its characteristics and its needs.

Talk to local community organizers, leaders, and migrant service program staff. Learn about local population fluctuations, peak seasons, origins, working conditions, lifestyles, and special problems.

2. Develop personal contacts in other agencies having contact with the target population.

Encourage usual sources of referrals, such as physicians and public assistance workers, to refer more disabled farm workers.

Develop contacts with such organizations as the following that serve farm workers in your area.

EOA-III-B grantees, and other Community Action Agencies such as those formerly funded by OEO.

DOL-funded programs, such as the National Migrant Farm Worker Program ("Last Yellow Bus") MDTA/E&D contractors.

PHS Migrant Health projects.

Church organizations, such as the Migrant Ministry, and Catholic diocesan programs for the Spanish-speaking.

United Farm Workers' Union.

ESEA-Title I-"Migrant Amendment" programs in the public schools, such as migrant summer schools, or schools participating in the National Migrant Record Transfer System funded by OE.

OEO Rural Legal Assistance or legal aid projects.

Jobs for Progress, Inc. ("Project SER"), funded by DOL, or by local or county revenue sharing.

Community organizations and community leaders with farm workers among their constituents.

EOA Migrant Head Start grantees funded by OCD.

Rural manpower services of the state employment security commission or state employment service.

Adult Basic Education programs.

DOL-funded programs such as CEP's, MDTA projects, and OIC's which serve major settling-out areas.

3. Involve the entire family or household in rehabilitation planning for the client.

This may require home visits during evening hours.

Be sure to involve extended family members (grandparents, etc.) who normally participate in family decisions.

Work to gain the confidence and support of the head of the house, if that person is not in fact your official client. This may help prevent unexpected departures by your client.

Try to provide other services to the family. Make referrals to other services for which they appear eligible, and provide follow-up advocacy at the agencies. Probe for other members possibly eligible for VR. To the extent permitted by your agency, provide training and placement services to other family members.

Obtain assistance as needed from a qualified family social worker.

4. Make sure that the family understands the timing of all phases of the rehabilitation plan.

Anticipate potential conflicts with seasonal work itineraries and plans for migration.

Explore alternatives to migration, such as having the client member of the family remain behind with a trusted relative.

Schedule long-term training or treatment plans around harvests and other employment seasons.

Accelerate the rehabilitation plan as much as possible (although without needlessly sacrificing occupational alternatives for the client).

5. Recognize and try to ease economic hardships that rehabilitation might temporarily impose upon the client's family.

Learn how the client has been contributing income or services to the household (e.g., helping in the fields, providing child care).

Help other family members obtain higher wages, better employment, or (if necessary) income maintenance services (e.g., AFDC-U, VR, social security, EOA-III-B emergency food and medical services).

Explore training programs with stipends.

6. Explore with the family the possibility of resettling into other localities or states with better labor markets.

Consider such strategies to be part of the rehabilitation plan. To the extent allowed by your

agency, assist with relocation expenses using VR training monies and any other available resources.

You may find that the family had already been considering such a move.

Research feasibility carefully. Consider impact on the total family earning capacity, not just the potential earnings of your client.

Secure the cooperation of VR or other agencies in the prospective settle-out area.

Be alert for complications, such as extended family ties and economic interdependence in the present home community.

Work to help arrange housing, job placement, social services or other assistance, in the prospective settle-out area.

7. Understand the validity problems associated with vocational evaluation and diagnostic tests used by VR.

8. Refer to health practitioners with adequate language skills and cultural sensitivity.

Consider their "track record" in the farm worker community. Use medical consultants to find suitable physicians, psychiatrists, and other practitioners.

9. Maintain frequent contact with migratory and other farm worker clientele.

Secure the assistance of case assistants and other agencies in maintaining contact with the client family at home.

Remain alert to unforseen problems or doubts experienced by the client or his family, and try to resolve them before the client disappears on you.

Don't depend upon mail, or on telephones that are not in the client's home.

Seek legal assitance if necessary to gain access to migrant camps.

Be sure the client knows how to get in touch with you, how to leave a message for you, etc. Arrange for competent bilingual receptionist services at your office. To the extent permitted by your agency, explain to clients that you can accept collect long-distance calls, particularly if he is migrating.

10. For ineligible farm worker referrals, or farm workers who must wait for VR services, provide referrals (with follow-up assistance) to other services as needed.

11. Probe carefully for vocational skills and aptitudes that might not be suggested by conventional evaluation techniques.

Don't be misled by superficial employment histories, limited formal education, or scores on standardized diagnostic tests.

12. Explore vocational alternatives to farm work.

Don't routinely assume that farm workers needing simple treatment services should be returned to seasonal farm work. Consider current and long-range farm labor market trends, and your client's year-round earning capacity.

The client may have already assumed that return to farm work is the only feasible vocational goal. Encourage him to explore other feasible goals with you, including goals requiring basic education and specialized training.

Don't be misled by local growers' problems with spot labor shortages. Consider larger trends in terms of the future welfare of your client.

13. Schedule appointments to avoid conflicts with earning activities of the client and other household members.

Arrange to work flexible hours.

Be alert to costs imposed on clients' families by transportation to appointments, time away from work, imposition upon present employers, etc. Provide or reimburse for transportation.

14. Originate and transfer cases for transient clientele.

Arrange with your supervisor to be given credit for casework not expected to lead to a status 26 closure for your office.

Facilitate case transfers to other communities or states, providing follow-up contact to assure service continuity.

Perform as many of the preliminary steps as time permits, such as medical evaluations and initial vocational counselling.

Brief clients on how they can reach you if they leave, irrespective of what they say their plans are.

If you receive a transfer, don't repeat evaluations or other time-consuming eligibility and planning procedures already accomplished by the previous counsellor. Contact the previous counsellor to coordinate service delivery. (Check for conflicting agency regulations.)

15. Set an informal quota of farm worker rehabilitations for your caseload, in co-operation with your supervisor.

Set informal quotas for both farm workers returned to farm work and farm workers retrained for other occupations.

Review with your supervisor realistic overall case closure rates for such a caseload.

APPENDIX A

Agricultural Migrants in the United States

COUNTIES HAVING APPROXIMATELY 100 OR MORE SEASONAL AGRICULTURAL WORKERS AND NONWORKING FAMILY DEPENDENTS THAT EITHER MIGRATED INTO, OR RESIDED IN, THE AREA AT SOME POINT DURING 1967–68

State and county	Total	Number home-based in county [1]	Number migrating into county [2]	Date of peak	Estimated span of crop season
Alabama:					
Baldwin	1,525	240	1,285	June 1	May 12–July 1.
Barbour	140	140			
Cullman	175		175	May 10	Apr. 25–June 1.
Dale	140	140			
Dallas	361	361			
De Kalb	871		871	July 18	July 1–Aug. 20.
Escambia	927	927			
Greene	119	119			
Henry	203	203			
Houston	120	120			
Mobile	100	100			
Russell	143	143			
Tuscaloosa	376	376			
Washington	181	181			
Total	5,381	3,050	2,331		
Arizona:					
Apache	2,892	2,892			
Cochise	2,190	300	1,890	June 15	Jan. 1–Dec. 31.
Coconino	2,892	2,892			
Maricopa	16,671	10,000	6,671	Nov. 30	Do.
Navajo	2,892	2,892			
Pima	4,137	3,762	375	Nov. 15	Do.
Pinal	20,000	15,000	5,000	Nov. 30	Do.
Yuma	9,600	4,244	5,356	June 15	Do.
Total	61,274	41,982	19,292		
Arkansas:					
Benton	376		376	Aug. 31	May 1–Sept. 30.
Craighead	125	125			
Hempstead	500		500		
Howard	100	100			
Jackson	225		225	July 15	May 15–Nov. 15.
Johnson	338		338	do	July 1–July 31.
Little River	125	125			
Mississippi	300		300	Sept. 30	Sept. 15–Nov. 15.
Poinsett	675		675	do	May 15–Nov. 15.
St. Francis	167	167			
Searcy	825		825	May 10	Apr. 20–May 25.
Washington	375	100	275		
White	4,200		4,200	May 10	Do.
Total	8,331	617	7,714		
California:					
Alemeda	1,037		1,037	Oct. 16	Jan. 1–Dec. 31.
Butte	1,812	201	1,611	Aug. 28	Do.
Colusa	618		618	Sept. 11	Do.
Contra Costa	640		640	Oct. 16	Do.
El Dorado	366	191	175	Aug. 28	July 26–Feb. 21.
Fresno	27,500	1,972	25,528	Sept. 4	Do.
Glenn	762		762	do	Do.
Imperial	13,099	10,787	2,312	Jan. 30	Do.
Kern	15,950	1,368	14,582	June 26	Do.
Kings	2,337	1,087	1,250	May 22	Do.
Lake	1,878	628	1,250	Aug. 21	Do.
Los Angeles	3,376	2,938	438	May 24	Do.

See footnotes at end of table, p. 113

COUNTIES HAVING APPROXIMATELY 100 OR MORE SEASONAL AGRICULTURAL WORKERS AND NONWORKING FAMILY DEPENDENTS THAT EITHER MIGRATED INTO, OR RESIDED IN, THE AREA AT SOME POINT DURING 1967-68—Continued

State and county	Total	Number home-based in county [1]	Number migrating into county [2]	Date of peak	Estimated span of Crop season
California—Continued					
Madera	3,250	.....	3,250	Sept. 11	July 26-Feb. 21
Marin	628	628	.....	.....	.....
Mendocino	1,440	628	812	Aug. 28	Do.
Merced	7,200	161	7,039	....do	Jan. 1-Dec. 31.
Modoc	312	.....	312	Oct. 16	Do.
Monterey	6,530	402	61,128	July 24	Do.
Napa	1,378	628	750	Aug. 21	Do.
Orange	2,052	402	1,650	June 12	Do.
Placer	641	191	450	Aug. 7	May 19-Feb. 20.
Riverside	7,000	2,576	4,424	July 24	Jan. 1-Dec. 31.
Sacramento	1,191	191	1,000	July 31	Do.
San Benito	4,000	.....	4,000	July 24	Do.
San Bernadino	2,242	1,167	1,075	Mar. 27	Do.
San Diego	4,295	3,945	350	July 17	Do.
San Joaquin	13,000	1,972	11,028	June 12	Do.
San Luis Obispo	672	201	471	July 24	Do.
San Mateo	1,092	604	488	Nov. 27	Do.
Santa Barbara	1,060	483	577	June 26	Do.
Santa Clara	4,000	483	3,517	Aug. 21	Do.
Santa Cruz	3,900	1,368	2,532	Oct. 9	Do.
Siskiyou	338	.....	338	Oct. 23	Do.
Solano	2,250	.....	2,250	Sept. 11	Do.
Sonoma	2,628	628	2,000	Aug. 28	Do.
Stanislaus	4,006	1,006	3,000	Aug. 14	Apr. 26-Nov. 20.
Sutter	6,000	5,500	500	Aug. 28	Jan. 1-Dec. 31.
Tehama	938	.....	938	Oct. 23	Jan. 18-Dec. 31.
Tulare	7,451	201	7,250	May 22	Do.
Ventura	6,203	765	5,438	June 26	Do.
Yolo	8,000	192	7,808	Sept. 4	Do.
Yuba	4,000	192	3,808	Aug. 7	Do.
Total	177,072	43,686	133,386	.....	
Colorado:					
Adams	656	.....	656	Aug. 15	Apr. 30-Nov. 15.
Alamosa	100	50	50	Oct. 15	Apr. 15-Nov. 15.
Baca	1,492	.....	1,492	Oct. 1	May 15-Oct. 31.
Bent	153	.....	153	Aug. 31	May 15-Oct. 15.
Boulder	251	.....	251	June 30	Do.
Conejos	200	100	100	Oct. 15	Apr. 15-Nov. 15.
Costilla	440	100	340	....do	Do.
Crowley	100	.....	100	.....	.....
Delta	344	.....	344	July 30	May 28-Oct. 29.
Dolores	306	.....	306	....do	July 15-Oct. 5.
Jackson	536	.....	536	Aug. 15	July 20-Oct. 1.
Kit Carson	1,685	1,285	400	June 15	May 10-July 30.
Larimer	950	900	50	....do	May 1-Sept. 30.
Logan	1,381	801	580	....do	May 1-July 30.
Mesa	2,372	315	2,057	Sept. 7	May 15-Oct. 28.
Montezuma	230	.....	230	July 30	July 15-Oct. 15.
Montrose	218	.....	218	June 15	May 15-July 15.
Morgan	1,812	.....	1,812	June 1	May 1-Nov. 1.
Otero	614	167	447	Aug. 20	Apr. 30-Oct. 31.
Prowers	268	.....	268	June 1	May 15-Sept. 30.
Pueblo	198	.....	198	Sept. 15	Do.
Rio Grande	221	68	153	Oct. 1	June 1-Oct. 20.
Saguache	136	52	84	....do	Do.
Sedgwick	477	.....	477	June 15	May 1-July 30.
Weld	4,000	.....	4,000	....do	May 1-Oct. 31.
Yuma	230	.....	230	June 1	May 1-Nov. 1.
Total	19,370	3,838	15,532	.....	
Connecticut:					
Fairfield	609	.....	609	.....	.....
Hartford	6,109	.....	6,109	Aug. 1	Mar. 1-Oct. 1.
Litchfield	609	.....	609	.....	.....
Middlesex	1,209	.....	1,209	....do	Do.
New Haven	809	.....	809	....do	Mar. 1-Sept. 30.
New London	609	.....	609	.....	.....
Tolland	1,109	.....	1,109	Aug. 1	Mar. 1-Oct. 1.
Windham	609	.....	609	.....	.....
Total	11,672	.....	11,672	.....	

See footnotes at end of table, p. 113

COUNTIES HAVING APPROXIMATELY 100 OR MORE SEASONAL AGRICULTURAL WORKERS AND NONWORKING FAMILY DEPENDENTS THAT EITHER MIGRATED INTO, OR RESIDED IN, THE AREA AT SOME POINT DURING 1967-68--Continued

State and county	Total	Number home-based in county [1]	Number migrating into county [2]	Date of peak	Estimated span of Crop season
Delaware:					
Kent	1,575	.....	1,575	July 31	Apr. 30-Oct. 31.
Newcastle	1,185	.....	1,185	May 31	Do.
Sussex	740	.....	740	July 31	Do.
Total	3,500	.....	3,500	.....	
Florida:					
Alachua	1,500	.....	1,500	May 31	Apr. 15-July 15.
Brevard	409	.....	409	Dec. 15	Oct. 15-May 31.
Broward	16,100	12,076	4,024	Feb. 28	Jan. 1-Dec. 31.
Charlotte	936	.....	936	Apr. 30	Do.
Collier	13,600	6,800	6,800	.....do	Do.
Dade	23,580	11,000	12,580	Jan. 31	Do.
De Soto	844	.....	844	May 15	Oct. 1-May 31.
Flagler	1,261	719	542	May 31	Oct. 30-May 31.
Glades	4,275	861	3,414	Feb. 28	Jan. 1-Dec. 31.
Hardee	1,681	.....	1,681	Jan. 31	Oct. 1-July 31.
Hendry	4,275	861	3,414	Feb. 28	Jan. 1-Dec. 31.
Highlands	3,450	2,925	525	Jan. 31	Oct. 1-July 31.
Hillsborough	434	.....	434	.....do	Oct. 1-Apr. 30.
Indian River	302	.....	302	.....do	Oct. 1-June 15.
Lake	1,710	.....	1,710	Dec. 31	Oct. 1-Aug. 31.
Lee	11,000	3,750	7,250	Apr. 30	Jan. 1-Dec. 31.
Manatee	5,900	900	5,000	May 15	Oct. 1-May 31.
Marion	167	.....	167	Apr. 30	Apr. 1-June 30.
Martin	1,136	21	1,115	Jan. 31	Oct. 1-June 15.
Orange	12,000	9,000	3,000	Feb. 15	Jan. 1-Dec. 31.
Palm Beach	30,977	20,977	10,000	Feb. 28	Jan. 1-July 15.
Polk	6,300	3,000	3,300	Jan. 31	Oct. 1-July 31.
Putnam	1,261	719	542	May 31	Oct. 30-May 31.
St. Johns	277	.....	277	.....do	Do.
St. Lucie	8,335	5,405	2,930	Jan. 31	Oct. 1-June 15.
Sarasota	2,500	500	2,000	May 15	Oct. 1-May 31.
Seminole	13,100	12,500	600	May 31	Oct. 1-July 15.
Sumter	190	.....	190	Dec. 31	Oct. 1-Aug. 31.
Union	190	.....	190	May 31	Apr. 15-July 15.
Volusia	1,483	.....	1,483	.....do	Oct. 1-July 15.
Total	169,173	92,014	77,159	.....	
Georgia:					
Bibb	201	201	.....	.....	
Coffee	133	133	.....	.....	
Decatur	110	.....	110	June 15	May 15-Oct. 15.
Dougherty	143	143	.....	.....	
Fulton	438	438	.....	.....	
Peach	157	157	.....	.....	
Ware	141	141	.....	.....	
Total	1,323	1,213	110	.....	
Hawaii: Maui	475	.....	475	July 1	May 1-Dec. 31.
Idaho:					
Ada	146	.....	146	Aug. 17	June 1-Oct. 1.
Bannock	488	105	383	June 15	May 1-Oct. 30.
Benewah	318	318	.....	.....	
Bingham	950	105	845	Oct. 15	May 20-Nov. 30.
Bonneville	495	.....	495	June 10	May 15-Oct. 25.
Butte	560	.....	560	Oct. 15	May 20-Oct. 30.
Canyon	3,481	.....	3,481	May 18	Apr. 1-Dec. 1.
Ca...	390	.....	390	June 20	May 15-Oct. 30.
Cassia	1,750	.....	1,750	Oct. 15	May 12-Nov. 10.
Elmore	444	.....	444	Aug. 17	Apr. 10-Nov. 1.
Franklin	675	.....	675	June 20	May 15-Sept. 7.
Gem	1,560	.....	1,560	June 25	June 20-Nov. 1.
Gooding	192	.....	192	May 15	May 1-June 16.
Jefferson	495	.....	495	June 10	May 15-Oct. 25.
Jerome	485	.....	485	June 28	May 15-Nov. 1.
Lewis	318	318	.....	.....	
Madison	237	.....	237	July 7	May 15-July 1.
Minidoka	2,700	.....	2,700	June 16	May 15-Oct. 30.
Nez Perce	396	185	211	July 21	June 16-Aug. 15.
Owyhee	634	.....	634	May 18	Feb. 15-Oct. 30.

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COUNTIES HAVING APPROXIMATELY 100 OR MORE SEASONAL AGRICULTURAL WORKERS AND NONWORKING FAMILY DEPENDENTS THAT EITHER MIGRATED INTO, OR RESIDED IN, THE AREA AT SOME POINT DURING 1967-68—Continued

State and county	Total	Number home-based in county [1]	Number migrating into county [2]	Date of peak	Estimated span of Crop season
Idaho—Continued					
Payette	630	.....	630	Sept. 25	Aug. 1-Oct. 1.
Power	625	105	520	June 15	May 1-Oct. 30.
Teton	175	.....	175	Aug. 25	Aug. 11-Sept. 3
Twin Falls	1,440	.....	1,440	May 26	May 10-Nov. 1.
Washington	420	.....	420	Sept. 20	May 1-Oct. 1.
Total	20,004	1,136	18,868	.....	
Illinois:					
Boone	600	.....	600	Aug. 30	Aug. 10-Oct. 4.
Bureau	295	.....	295	May 31	May 17-July 4.
Cook	700	.....	700	Aug. 31	Aug. 10-Sept. 30.
Crawford	450	.....	450	May 31	May 10-31.
De Kalb	562	.....	562	Aug. 31	May 15-Oct. 4.
Du Page	319	.....	319	.....	
Fayette	535	.....	535	May 31	May 10-31.
Grundy	510	.....	510	Aug. 31	Aug. 10-Oct. 4.
Iroquois	1,170	.....	1,170	July 15	May 1-Sept. 15.
Jefferson	1,200	.....	1,200	May 31	May 10-31.
Kane	319	.....	319	Sept. 30	Aug. 10-Oct. 4.
Kendall	775	.....	775	.....do	Do.
Lake	319	.....	319	.....	
La Salle	825	.....	825	July 15	May 15-Oct. 4.
Lee	580	.....	580	Aug. 28	Aug. 10-Oct. 4.
Livingston	1,203	.....	1,203	Aug. 31	Do.
Marion	1,200	.....	1,200	May 31	May 10-31.
McHenry	319	.....	319	Aug. 31	Aug. 10-Oct. 4.
Mercer	319	.....	319	.....	
Ogle	1,160	.....	1,160	Aug. 31	May 15-Oct. 4.
Peoria	635	.....	635	June 30	June 28-Nov. 15.
Rock Island	316	.....	316	Aug. 31	Aug. 10-Oct. 1.
Union	1,500	.....	1,500	Aug. 15	Aug. 1-Sept. 1.
Vermilion	2,319	.....	2,319	May 31	Apr. 30-Oct. 5.
Washington	750	.....	750	.....do	May 10-31.
Will	638	.....	638	Aug. 31	Aug. 10-Sept. 30.
Total	19,518	.....	19,518	.....	
Indiana:					
Adams	435	.....	435	Sept. 3	May 1. -Oct. 15.
Allen	177	.....	177	.....do	Do.
Benton	125	.....	125	.....do	Do.
Blackford	235	.....	235	Sept. 17	Do.
Boone	143	.....	143	Sept. 10	Do.
Brown	100	.....	100	.....do	Do.
Carroll	251	.....	251	Sept. 3	Do.
Cass	312	.....	312	Aug. 17	Do.
Clinton	620	.....	620	Sept. 3	Do.
Delaware	256	.....	256	Sept. 10	Do.
Floyd	200	.....	200	June 4	May 15-June 10.
Grant	1,945	.....	1,945	Sept. 17	May 1-Oct. 15.
Hancock	140	.....	140	Sept. 10	Do.
Henry	964	.....	964	Sept. 3	Do.
Howard	702	.....	702	Sept. 10	Do.
Huntington	509	.....	509	Sept. 3	Do.
Jackson	102	.....	102	.....do	Do.
Jasper	261	.....	261	July 23	Mar. 1-Nov. 15.
Jay	515	.....	515	Sept. 10	May 1-Oct. 15.
Johnson	130	.....	130	.....do	Do.
Knox	113	.....	113	June 4	May 20-June 10.
Kosciusko	187	.....	187	Sept. 3	May 1-Oct. 15.
Lake	264	.....	264	Sept. 10	Apr. 15-Oct. 30.
La Grange	100	.....	100	.....	
La Porte	361	.....	361	Aug. 6	Do.
Madison	514	.....	514	Sept. 10	May 1-Oct. 15.
Marshall	1,235	.....	1,235	July 23	May 15-Oct. 15.
Miami	106	.....	106	Sept. 10	May 1-Oct. 15.
Noble	233	.....	233	Sept. 3	Do.
Porter	100	.....	100	.....	
Pulaski	133	.....	133	July 23	Apr. 1-Oct. 30.
Randolph	348	.....	348	Sept. 10	May 1-Oct. 5.
Ripley	296	.....	296	.....do	Aug. 1-Sept. 30.
Rush	105	.....	105	.....do	Aug. 10-Oct. 15.
St. Joseph	229	.....	229	Aug. 6	Apr. 1-Oct. 15.
Scott	150	.....	150	Sept. 3	May 1-Oct. 15.
Shelby	100	.....	100	.....	
Tippecanoe	100	.....	100	.....	

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COUNTIES HAVING APPROXIMATELY 100 OR MORE SEASONAL AGRICULTURAL WORKERS AND NONWORKING FAMILY DEPENDENTS THAT EITHER MIGRATED INTO, OR RESIDED IN, THE AREA AT SOME POINT DURING 1967-68—Continued

State and county	Total	Number home-based in county [1]	Number migrating into county [2]	Date of peak	Estimated span of Crop season
Indiana—Continued					
Tipton	801	.....	801	Sept. 10.....	May 1-Oct. 15.
Wabash	359	.....	359	Sept. 17.....	Do.
Wells	419	.....	419	Sept. 3.....	Do.
Total	14,375	.....	14,375	.....	
Iowa:					
Cedar	270	.....	270	Aug. 1-30.....	May 1-Sept. 30.
Cerro Gordo	118	.....	118	.....	
Floyd	87	.....	87	.....	
Franklin	103	.....	103	.....	
Grundy	96	.....	96	.....	
Hamilton	48	.....	48	.....	
Hancock	89	.....	89	.....	
Kossuth	35	.....	35	.....	
Louisa	225	.....	225	Aug. 1-30.....	Do.
Muscatine	525	.....	525	.....do.....	Apr. 15-Sept. 30.
Scott	180	.....	180	.....	
Winnebago	81	.....	81	.....	
Worth	46	.....	46	.....	
Total	1,903	.....	1,903	.....	
Kansas:					
Finney	555	150	405	July 1.....	May-16-Aug. 31.
Grant	254	.....	254	June 28.....	May 15-Aug. 29.
Greeley	256	.....	256	.....	
Haskell	100	.....	100	.....	
Kearny	188	.....	188	July 1.....	May 15-Aug. 30.
Meade	100	.....	100	.....	
Scott	255	.....	255	.....	
Seward	100	.....	100	.....	
Sherman	727	.....	727	July 7.....	May 20-Sept. 1.
Stanton	282	.....	282	June 29.....	May 10-Aug. 20.
Stevens	100	.....	100	.....	
Wallace	728	.....	728	July 6.....	May 20-Sept. 1.
Wichita	255	125	130	July 3	May 17-Aug. 25.
Wyandotte	1,037	301	736	June 15.....	May 1-Oct. 30.
Total	4,937	576	4,361	.....	
Kentucky:					
Carlisle	403	.....	403	May 25.....	May 10-June 10.
Hickman	403	.....	403	.....do.....	Do.
Trimble	120	.....	120	July 15.....	June 1-July 15.
Total	926	.....	926	.....	
Louisiana:					
Assumption	346	.....	346	Nov. 1.....	Sept. 5-Dec. 31.
Caddo	128	.....	116	.....	
East Baton Rouge	116	128	.....	.....	
Lafourche	504	.....	504	Nov. 1.....	Aug. 25-Dec. 31.
Livingston	410	.....	410	Apr. 15.....	Apr. 1-May 13.
Ouachita	145	145	.....	.....	
Rapides	160	160	.....	.....	
St. Charles	126	.....	126	Nov. 1.....	Sept. 15-Dec. 31.
St. James	378	.....	378	.....do.....	Sept. 15-Jan. 7.
St. John the Baptist	189	.....	189	.....do.....	Sept. 15-Dec. 31.
St. Tammany	108	108	.....	.....	
Terrebonne	315	.....	315	Nov. 1.....	Aug. 20-Dec. 31.
Tangipahoa	3,400	800	2,600	Apr. 15.....	Apr. 1-May 13.
Washington	148	148	.....	.....	
Total	6,473	1,605	4,868	.....	
Maine:					
Aroostook	1,200	.....	1,200	.....	
Penobscot	350	200	150	.....	
Piscataquis	150	.....	150	.....	
Somerset	150	.....	150	.....	
Washington	200	200	.....	.....	
Total	2,050	400	1,650	.....	

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COUNTIES HAVING APPROXIMATELY 100 OR MORE SEASONAL AGRICULTURAL WORKERS AND NONWORKING FAMILY DEPENDENTS THAT EITHER MIGRATED INTO, OR RESIDED IN, THE AREA AT SOME POINT DURING 1967-68—Continued

State and county	Total	Number home-based in county [1]	Number migrating into county [2]	Date of peak	Estimated span of Crop season
Maryland:					
Caroline	480	.....	480	Aug. 15	June 15-Sept. 15.
Dorchester	1,440	.....	1,440	July 31	Apr. 18-Nov. 20.
Frederick	170	.....	170	....do	Mar. 15-Oct. 31.
Kent	330	.....	330	May 15	Mar. 15-Nov. 30.
Somerset	840	.....	840	July 15	June 1-Nov. 1.
Talbot	300	.....	300	July 31	Apr. 15-Sept. 30.
Washington [3]	85	.....	85	Oct. 15	June 15-Nov. 15.
Wicomico	212	.....	212	July 15	May 15-Nov. 15.
Worcester	800	300	500	Aug. 15	June 15-Oct. 31.
Total	4,657	300	4,357	.....	
Massachusetts:					
Barnstable	100	.....	100	.....	
Bristol	224	.....	224	July 15	Apr. 8-Oct. 31.
Dukes	100	.....	100	.....	
Essex	224	.....	224	Aug. 15	Apr. 1-Nov. 15.
Franklin	448	.....	448	Aug. 16	June 1-Nov. 15.
Hampden	1,118	.....	1,118	....do	Do.
Hampshire	1,342	.....	1,342	July 31	May 1-Sept. 15.
Middlesex	672	.....	672	Aug. 15	Apr. 1-Nov. 30.
Norfolk	100	.....	100	.....	
Plymouth	448	.....	448	Sept. 30	Mar. 30-Nov. 15.
Worcester	224	.....	224	Oct. 1	May 15-Oct. 15.
Total	5,000	.....	5,000	.....	
Michigan:					
Allegan	2,880	.....	2,880	Aug. 31	May 15-Nov. 15.
Alpena	387	.....	387	July 15	June 20-Aug. 15.
Antrim	1,912	.....	1,912	Aug. 10	June 20-Aug. 30.
Arenac	174	.....	174	July 31	July 15-Aug. 25.
Bay	6,000	5,339	661	....do	May 20-Sept. 20.
Benzie	2,500	100	2,400	July 25	June 15-Nov. 5.
Berrien	12,480	763	11,717	June 15	May 10-Nov. 5.
Cass	1,560	.....	1,560	....do	May 10-Sept. 30.
Cheboygan	387	.....	387	.....	
Eaton	248	.....	248	Aug. 31	July 20-Sept. 15.
Gladwin	1,500	.....	1,500	.....	
Grand Traverse	10,372	2,000	8,372	July 25	June 20-Oct. 31.
Gratiot	382	.....	382	July 31	June 5-Sept. 15.
Huron	968	.....	968	June 30	May 20-Aug. 10.
Ingham	546	.....	546	July 31	June 15-Nov. 5.
Ionia	912	.....	912	Aug. 15	June 30-Nov. 5.
Isabella	1,500	.....	1,500	....do	July 20-Sept. 15.
Jackson	141	.....	141	Aug. 10	July 30-Aug. 31.
Kalamazoo	1,033	763	270	June 30	June 10-July 20.
Kent	996	.....	996	Sept. 30	July 10-Nov. 5.
Lapeer	270	.....	270	Sept. 15	June 20-Oct. 31
Leelanau	8,043	500	7,543	July 31	June 20-Oct. 25.
Lenawee	1,393	763	630	Sept. 30	Aug. 15-Oct. 20.
Manistee	4,392	.....	4,392	July 25	June 1-Nov. 5.
Mason	3,298	.....	3,298	....do	June 5—Oct. 25.
Macomb	338	.....	338	Sept. 15	Aug. 15-Nov. 5.
Mecosta	225	.....	225	July 31	July 20-Aug. 10.
Midland	282	.....	282	....do	July 15-Sept. 15.
Monroe	1,300	763	537	Sept. 15	May 15-Nov. 5.
Montcalm	1,080	.....	1,080	Aug. 15	June 20-Nov. 5.
Montmorency	387	.....	387	.....	
Muskegon	715	.....	715	Aug. 15	July 15-Oct. 25.
Newaygo	219	.....	219	Aug. 31	July 10-Oct. 10.
Oakland	225	.....	225	Sept. 30	Aug. 15-Nov. 5.
Oceana	5,510	.....	5,510	July 25	May 15-Oct. 31.
Ottawa	4,500	763	3,737	Aug. 31	June 20-Nov. 5.
Presque Isle	387	.....	387	.....	
Saginaw	5,000	2,000	3,000	June 15	May 20-Sept. 20.
St. Clair	304	.....	304	July 31	June 10-Sept. 15.
St. Joseph	580	.....	580	June 15	June 1-July 20.
Sanilac	1,265	.....	1,265	July 31	May 20-Sept. 30.
Shiawassee	112	.....	112	Aug. 31	Aug. 5-Sept. 10.
Tuscola	1,287	.....	1,287	June 15	May 20-Sept. 25.
Van Buren	9,360	.....	9,360	....do	May 10-Nov. 15.
Wayne	863	763	100	.....	
Total	98,213	14,517	83,696	.....	

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State and county	Total	Number home-based in county [1]	Number migrating into county [1]	Date of peak	Estimated span of Crop season
Minnesota:					
Anoka	28	.....	28	.....	
Big Stone	97	.....	97	.....	
Blue Earth	50	.....	50	.....	
Carver	50	.....	50	.....	
Chippewa	40	.....	40	June 25.....	May 31-July 26.
Clay	1,157	.....	1,157	.....do.....	June 7-Oct. 25.
Faribault	223	.....	223	.....do	May 31-July 26.
Freeborn	986	.....	986	June 11.....	May 10-Oct. 25.
Kandiyohi	109	.....	109	.....	
Kittson	602	.....	602	June 25.....	June 7-July 26.
Lac qui Parle	43	.....	43	.....	
Marshall	816	.....	816	June 25.....	June 7-Oct. 25.
Martin	68	.....	68	.....	
Meeker	50	.....	50	.....	
McLeod	108	.....	108	.....	
Norman	423	.....	423	June 25.....	Do.
Polk	1,757	.....	1,757	.....do.....	Do.
Redwood	143	.....	143	.....	
Renville	612	.....	612	June 25.....	May 31-July 26.
Sibley	41	.....	41	.....	
Steele	312	.....	312	June 25.....	May 10-July 12.
Swift	244	.....	244	.....do.....	May 31—July 26.
Waseca	118	.....	118	.....	
Watonwan	24	.....	24	.....	
Wilkin	50	.....	50	June 25.....	June 7-July 26.
Yellow Medicine	99	.....	99	.....	
Total	8,250	.....	8,250	.....	
Mississippi:					
Alcorn	153	153	.....	.....	
Bolivar	288	288	.....	.....	
Clarke	105	105	.....	.....	
Clay	130	130	.....	.....	
Coahoma	227	227	.....	.....	
Copiah	125	125	.....	.....	
Forrest	111	111	.....	.....	
Grenada	183	183	.....	.....	
Harrison	108	108	.....	.....	
Hinds	404	404	.....	.....	
Holmes	318	318	.....	.....	
Lauderdale	275	275	.....	.....	
Leflore	901	901	.....	.....	
Lowndes	370	370	.....	.....	
Marion	287	287	.....	.....	
Monroe	342	342	.....	.....	
Pike	153	153	.....	.....	
Sunflower	507	507	.....	.....	
Tunica	115	115	.....	.....	
Warren	304	304	.....	.....	
Washington	367	367	.....	.....	
Yazoo	435	435	.....	.....	
Total	6,208	6,208	.....	.....	
Missouri:					
Dunklin	1,428	1,200	228	June 15.....	May 1-July 15.
Lafayette	228	.....	228	Sept. 15.....	Aug. 20-Oct. 10.
Mississippi	1,542	1,200	342	Oct. 15.....	May 15-Nov. 15.
New Madrid	2,970	2,400	570	June 15.....	Do.
Pemiscot	1,900	1,900	.....	.....	
Scott	353	125	228	June 15.....	Do.
Stoddard	806	350	456	Oct. 15.....	Do.
Total	9,227	7,175	2,052		
Montana:					
Beaverhead	150	.....	150	July 15.....	July 1-Aug. 15.
Big Horn	1,278	358	920	June 15.....	May 15-Aug. 15.
Blaine	150	.....	150	June 20.....	June 1-Aug. 15.
Broadwater	150	.....	150	June 15.....	June 1-Aug. 1.
Carbon	300	.....	300	.....do.....	May 15-Aug. 1.
Cascade	638	.....	638	Aug. 15.....	July 1-Aug. 25.
Chouteau	338	.....	338	.....do.....	Do.
Custer	412	.....	412	July 15.....	May 15-Aug. 15.
Daniels	135	135	.....	.....	

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COUNTIES HAVING APPROXIMATELY 100 OR MORE SEASONAL AGRICULTURAL WORKERS AND NONWORKING FAMILY DEPENDENTS THAT EITHER MIGRATED INTO, OR RESIDED IN, THE AREA AT SOME POINT DURING 1967-68—Continued

State and county	Total	Number home-based in county [1]	Number migrating into county [2]	Date of peak	Estimated span of Crop season
Montana—Continued					
Dawson	592	.....	592	June 23	Apr. 1-Sept. 1.
Glacier	543	543	.....	.....	.....
Gallatin	150	.....	150	July 15	July 1-Aug. 15.
Hill	508	358	150	June 20	June 1-Aug. 15.
Judith Basin	300	.....	300	Aug. 15	July 1-Aug. 25.
Lake	543	543	.....	.....	.....
Missoula	255	.....	255	June 15	May 15-July 15.
Park	150	.....	150	July 15	July 1-Aug. 15
Prairie	278	.....	278	do	May 15-Aug. 15.
Ravalli	210	.....	210	June 15	May 15-July 15.
Richland	2,175	.....	2,175	do	Do.
Roosevelt	358	358	.....	.....	.....
Rosebud	358	358	.....	.....	.....
Sanders	543	543	.....	.....	.....
Treasure	225	.....	225	June 15	May 15-Aug. 1.
Teton	300	.....	300	Aug. 15	July 1-Aug. 15.
Valley	358	358	.....	.....	.....
Yellowstone	825	.....	825	June 15	May 15-Aug. 1.
Total	12,222	3,554	8,668	.....	.....
Nebraska:					
Box Butte	557	100	457	June 15	.....
Chase	100	.....	100	.....	.....
Cheyenne	140	140	.....	.....	.....
Dawson	192	.....	192	June 15	May 15-July 31.
Deuel	146	.....	146	do	Do.
Keith	190	.....	190	do	Do.
Lincoln	203	203	.....	.....	.....
Morrill	854	118	736	June 10	Do.
Perkins	100	.....	100	.....	.....
Scotts Bluff	3,143	282	2,861	June 10	Do.
Sioux	63	.....	63	.....	.....
Total	5,688	843	4,845	June 10	Do.
Nevada:					
Clark	472	.....	472	Mar. 31	Feb. 1-June 5.
Elko	510	.....	510	Aug. 8	July 1-Oct. 10.
Humboldt	204	.....	204	Aug. 10	Do.
Total	1,186	.....	1,186	.....	.....
New Hampshire: Rockingham	109	.....	109	Sept. 15	Sept. 1-Oct. 15
New Jersey:					
Atlantic	2,193	.....	2,193	July 15	Apr. 1-Nov. 15.
Bergen	306	.....	306	Aug. 31	Apr. 1-Nov. 1.
Burlington	650	.....	650	July 27	Apr. 15-Nov. 25.
Camden	1,224	.....	1,224	Aug. 31	Apr. 15-Nov. 15.
Cape May	173	.....	173	do	May 28-Nov. 15.
Cumberland	4,139	.....	4,139	Aug. 15	Mar. 1-Nov. 15.
Gloucester	1,750	.....	1,750	Aug. 31	Apr. 15-Nov. 15.
Mercer	240	.....	240	Aug. 20	Mar. 1-Nov. 25.
Middlesex	325	.....	325	do	Do.
Monmouth	1,300	.....	1,300	do	Do.
Morris	209	.....	209	Sept. 10	Apr. 15-Nov. 1.
Passaic	204	.....	204	Aug. 31	Apr. 1-Nov. 1.
Salem	2,264	.....	2,264	do	Mar. 1-Nov. 15.
Warren	217	.....	217	Sept. 10	Apr. 15-Nov. 1.
Total	15,194	.....	15,194	.....	.....
New Mexico:					
Curry	519	.....	519	.....	.....
De Baca	518	.....	518	.....	.....
Dona Ana	4,000	.....	4,000	June 15	May 24-Dec. 15.
Guadalupe	2,000	2,000	.....	.....	.....
Lea	270	.....	270	July 15	Jan. 1-Dec. 31.
Mora	3,000	3,000	.....	.....	.....
Quay	518	.....	518	Sept. 15	June 1-Nov. 10.
Rio Arriba	4,200	4,200	.....	.....	.....
Roosevelt	518	.....	518	Sept. 15	June 15-Dec. 12.
San Juan	1,140	1,140	.....	.....	.....
San Miguel	10,000	10,000	.....	.....	.....

See footnotes at end of table, p. 113

COUNTIES HAVING APPROXIMATELY 100 OR MORE SEASONAL AGRICULTURAL WORKERS AND NONWORKING FAMILY DEPENDENTS THAT EITHER MIGRATED INTO, OR RESIDED IN, THE AREA AT SOME POINT DURING 1967-68—Continued

State and county	Total	Number home-based in county [1]	Number migrating into county [2]	Date of peak	Estimated span of Crop season
New Mexico—Continued					
Taos	3,800	3,800			
Torrance	270		270	Oct. 14	Sept. 10-Oct. 25.
Total	30,753	24,140	6,613		
New York:					
Albany	100		100		
Broome	126		126	Oct. 27	Sept. 29-Oct. 27.
Cayuga	589		589	Aug. 25	June 16-Oct. 27.
Chautauqua	351		351	Sept. 1	June 23-Oct. 27
Chenango	300		300		
Columbia	1,106		1,106	Sept. 29	June 16-Oct. 27.
Delaware	105		105	Sept. 8	July 15-Oct. 15.
Dutchess	819		819	Sept. 29	July 7-Oct. 27.
Erie	1,128		1,128	June 30	May 5-Oct. 15.
Genesee	591		591	Aug. 4	June 10-Oct. 27.
Herkimer	300		300	Sept. 1	July 15-Oct. 15.
Livingston	538		538	Sept. 29	June 20-Oct. 27.
Madison	300		300		
Monroe	2,667		2,667	Sept. 15	May 15-Oct. 27.
Niagara	572		572	Sept. 8	June 30-Oct 27.
Oneida	300		300	Aug. 11	June 15-Oct. 15
Ontario	1,500		1,500	Sept. 1	Do.
Orange	1,516		1,516	Sept. 8	May 15-Oct. 27.
Orleans	2,666		2,666	Sept. 5	May 15-Nov. 15.
Oswego	409		409	Aug. 25	May 1-Nov. 1.
Rockland	132		132	Sept. 8	May 15-Oct. 27.
Steuben	2,180		2,180	Sept 29	Aug. 1-Nov. 1.
Suffolk	3,000		3,000	Oct. 13	Jan. 1-Dec. 31.
Ulster	3,000		3,000	Sept. 29	May 15-Nov. 1.
Wayne	2,666		2,666	Aug. 4	May 15-Nov. 15.
Wyoming	819		819	Oct. 6	Aug. 15-Oct. 15.
Yates	1,500		1,500	Sept. 1	June 15-Oct. 15.
Total	29,280		29,280		
North Carolina:					
Alleghany	192		192	Aug. 20	July 15-Sept. 15.
Ashe	197		197	do	Do.
Beaufort	549	123	426	June 20	June 1-July 15.
Bladen	214	214			
Brunswick	107	107			
Buncombe	219	219			
Camden	370		370	June 30	June 10-Dec. 15.
Carteret	365		365	May 25	May 1-July 10.
Caswell	261		261	Aug. 25	June 15-Oct. 1.
Cherokee	100	100			
Chowan	134	134			
Cleveland	214	214			
Columbus	112	112			
Cumberland	123	123			
Currituck	226		226	June 15	May 15-Nov. 10.
Duplin	538	112	426	June 28	Apr. 20-Aug. 15.
Durham	134	134			
Forsyth	299	187	112	Aug. 20	July 20-Sept. 15.
Graham	240	240			
Greene	853		853	July 15	July 1-Aug. 20.
Guilford	497	161	336	Aug. 20	May 10-Oct. 12.
Halifax	134	134			
Harnett	213		213	July 1	July 1-Nov. 15.
Haywood	801	268	533	Aug. 15	May 1-Nov. 1.
Henderson	3,415	268	3,147	do	Do.
Hyde	107	107			
Jackson	1,500	1,500			
Johnston	1,733	134	1,599	July 25	July 1-Oct. 31.
Jones	346		346	July 15	July 1-Aug. 20.
Lenoir	426		426	do	Do.
Madison	107	107			
New Hanover	401	134	267	June 15	May 1-July 10.
Northampton	268	268			
Pamlico	320		320	June 20	June 1-July 20.
Pasquotank	628		628	June 30	June 10-Dec. 10.
Pender	762	123	639	June 15	May 1-July 10.
Person	107	107			
Pitt	693		693	July 15	July 1-Aug. 20.
Polk	320		320	Sept. 15	May 1-Oct. 30.

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COUNTIES HAVING APPROXIMATELY 100 OR MORE SEASONAL AGRICULTURAL WORKERS AND NONWORKING FAMILY DEPENDENTS THAT EITHER MIGRATED INTO, OR RESIDED IN, THE AREA AT SOME POINT DURING 1967-68—Continued

State and county	Total	Number home-based in county [1]	Number migrating into county [2]	Date of peak	Estimated span of Crop season
North Carolina—Continued					
Robeson	161	161			
Rockingham	565	107	458	Aug. 25	Apr. 15–Oct. 15.
Rutherford	321	321			
Sampson	949	321	628	June 15	June 1–Nov. 30.
Stokes	352		352	Aug. 25	May 22–Oct. 5
Surry	368		368	Aug. 27	June 15–Nov 1.
Swain	1,710	1,710			
Transylvania	480	214	266	July 15	June 1–Oct. 30.
Tyrrell	139		139	Sept. 25	Sept. 10–Oct. 25.
Wake	694	161	533	July 25	July 1–Aug. 25.
Watauga	197		197	Aug. 20	July 15–Sept. 15.
Washington	107	107			
Wayne	801	375	426	May 25	Apr. 20–Aug. 15.
Wilkes	309		309	Sept. 24	July 15–Nov. 15
Wilson	454	134	320	Sept. 20	Sept. 1–Nov. 1.
Yadkin	528	112	416	Aug. 27	June 15–Nov. 1.
Total	26,360	9,053	17,307		
North Dakota:					
Cass	600		600	June 10–15	June 1–July 25.
Grand Forks	1,530		1,530	Oct. 10–20	June 1–Nov. 1.
McKenzie	218		218	June 10–25	June 1–July 1.
McLean	451	451			
Pembina	1,012		1,012	July 10–23	June 1–Oct. 30.
Sioux	451	451			
Steele	225		225	Oct. 10–20	Sept. 10–Oct. 27.
Traill	750		750	June 15–July 14.	June 1–July 25.
Walsh	600		600	July 8–23	June 1–Oct. 29
Williams	300		300	June 10–25	June 1–July 1.
Total	6,137	902	5,235		
Ohio:					
Allen	167		167	Sept. 15	May 1–Oct. 31.
Auglaize	584		584	do	Do.
Ashtabula	334		334	Oct. 31	Do.
Darke	1,000		1,000	Sept. 15	Do.
Defiance	167		167	do	Do.
Erie	334		334	do	Do.
Fulton	2,207		2,207	do	Do.
Hancock	2,147		2,147	do	Do.
Henry	2,250		2,250	do	Do.
Huron	250		250	do	Do.
Lake	160		160	June 15	Do.
Lucas	372		372	Sept. 15	Do.
Mercer	700		700	do	Do.
Miami	208		208	do	Do.
Ottawa	2,000		2,000	do	Do.
Paulding	167		167	do	Do.
Portage	334		334	Sept. 30	Do.
Putnam	2,147		2,147	Sept. 15	Do.
Sandusky	11,900		11,900	do	Do.
Seneca	1,571		1,571	do	Do.
Stark	550		550	Sept 30	Do.
Van Wert	500		500	Sept. 15	Do.
Williams	834		834	do	Do.
Wood	1,700		1,700	do	Do.
Total	32,583		32,583		
Oklahoma:					
Adair	200	200			
Beckham	447	250	197	June 11	June 1–24.
Blaine	864	157	707	June 12	June 3–26.
Caddo	561	157	404	June 10	June 1–23.
Canadian	620		620	June 11	June 2–25.
Cherokee	100	100			
Comanche	403	157	246	June 3	May 27–June 21.
Cotton	614	157	457	June 1	May 25–June 20.
Custer	923	200	723	June 11	June 2–25.
Dewey	659	157	502	June 14	June 5–27.
Garvin	861		861	July 25	July 5–Sept. 1.
Grady	210		210	June 10	June 1–Aug. 20.
Greer	652	400	252	Oct. 10	May 27–Nov. 30.
Harmon	1,329	850	479	do	May 29–Dec. 15.

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COUNTIES HAVING APPROXIMATELY 100 OR MORE SEASONAL AGRICULTURAL WORKERS AND NONWORKING FAMILY DEPENDENTS THAT EITHER MIGRATED INTO, OR RESIDED IN, THE AREA AT SOME POINT DURING 1967-68—Continued

State and county	Total	Number home-based in county [1]	Number migrating into county [2]	Date of peak	Estimated span of Crop season
Oklahoma—Continued					
Jackson	2,220	1,400	820	Oct. 15	May 25–Dec. 20.
Kingfisher	1,057	157	900	June 12	June 3–26.
Kiowa	1,386	550	836	June 7	May 27–June 22.
Roger Mills	388	157	231	June 14	June 5–27.
Sequoyah	100	100			
Tillman	1,610	860	750	June 1	May 25–Nov. 20.
Tulsa	700	700			
Washita	950	250	700	June 10	June 1–24
Total	16,854	6,959	9,895		
Oregon:					
Clackamas	3,000		3,000	July 15	May 20–Sept. 10.
Crook	170		170	Oct. 31	July 1–Nov. 10.
Deschutes	142		142	do	Oct. 16–Nov. 1.
Harney	248		248	July 31	July 1–Jan. 10.
Hood River	2,500		2,500	Sept. 30	Mar. 10–Oct. 25.
Jackson	1,645		1,645	Aug. 31	June 5–Oct. 10.
Jefferson	636	280	356	Oct. 15	Apr. 25–Nov. 10.
Klamath	500		500	Sept. 30	May 10–Oct. 25
Lane	1,140		1,140	Aug. 15	June 10–Sept. 5.
Linn	1,838		1,838	July 31	May 20–Sept. 20.
Malheur	2,705		2,705	June 15	Apr. 20–Oct. 31.
Marion	10,700		10,700	Aug. 15	Mar. 10–Oct. 20.
Multnomah	178		178	do	June 20–Aug. 25.
Polk	2,850		2,850	June 30	Mar. 20–Oct. 15.
Umatilla	1,585	280	1,305	June 15	Apr. 10–Sept. 30
Union	498		498	July 31	July 5–Aug. 10.
Wallowa	285		285	do	June 20–Aug. 10.
Wasco	6,280	280	6,000	June 30	Mar. 10–Aug. 20.
Washington	2,500		2,500	do	May 20–Sept. 20.
Yamhill	4,673		4,673	do	June 5–Sept. 10.
Total	44,073	840	43,233		
Pennsylvania:					
Adams	1,310		1,310	Oct. 15	June 10–Nov. 15.
Berks	400		400	Aug. 31	June 10–Nov. 10.
Bucks	175		175	do	June 1–Nov. 15.
Chester	107		107	do	Aug. 1–Oct. 31.
Columbia	430		430	do	June 1–Oct. 31.
Cumberland	199		199	do	Aug. 1–Oct. 31.
Dauphin	177		177		
Erie	406		406	Sept. 30	Aug. 19–Oct. 31.
Franklin	581		581	Aug. 31	June 10–Nov. 15.
Lackawanna	191		191	Sept. 15	Aug. 1–Nov. 10.
Lancaster	315		315	Aug. 31	June 1–Oct. 31.
Lebanon	199		199		
Lehigh	481		481	Sept. 20	Aug. 1–Nov. 10.
Luzerne	351		351	Sept. 15	July 20–Oct. 15.
Lycoming	197		197	Aug. 31	Aug. 1–Oct. 31.
Monroe	100		100		
Montour	189		189	Aug. 31	Do.
Northampton	111		111		
Northumberland	737		737	Aug. 31	Do.
Potter	524		524	Sept. 15	June 20–Oct. 20.
Schuylkill	369		369	Aug. 31	Aug. 1–Oct. 31.
Snyder	110		110	do	Aug. 1–Oct. 15.
Union	110		110		
Wyoming	37		37	Sept. 15	Do.
York	220		220	Aug. 31	July 25–Oct. 31.
Total	8,026		8,026		
Puerto Rico:					
Aguadilla	1,692	1,692			
Arecibo	3,540	3,540			
Bayamon	2,238	2,238			
Caguas	2,238	2,238			
Guayama	2,092	2,092			
Humacao	2,869	2,869			
Mayaguez	3,546	3,546			
Ponce	3,719	3,719			
San Juan	1,400	1,400			
Total	23,334	23,334			

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COUNTIES HAVING APPROXIMATELY 100 OR MORE SEASONAL AGRICULTURAL WORKERS AND NONWORKING FAMILY DEPENDENTS THAT EITHER MIGRATED INTO, OR RESIDED IN, THE AREA AT SOME POINT DURING 1967-68—Continued

State and county	Total	Number home-based in county [1]	Number migrating into county [2]	Date of peak	Estimated span of Crop season
Rhode Island:					
Newport	100	.....	100	Sept. 30	Sept. 11-Nov. 30.
Providence	160	.....	160	do	Sept. 11-Oct. 30.
Washington	205	.....	205	do	Aug. 1-Nov. 30.
Total	465	.....	465	.....	
South Carolina:					
Aiken	158	.....	158	July 30	June 15-July 30.
Allendale	105	.....	105	June 30	June 15-July 15.
Barnwell	158	.....	158	do	May 31-July 31.
Beaufort	1,601	100	1,501	do	May 15-Oct. 15.
Charleston	4,395	2,250	2,145	do	May 15-June 30.
Cherokee	210	.....	210	do	May 15-July 30.
Edgefield	420	.....	420	July 15	June 15-July 30.
Horry	2,268	.....	2,268	Aug. 15	May 31-Oct. 31.
Spartanburg	1,575	.....	1,575	Aug. 31	Feb. 15-Aug. 31.
Sumter	158	.....	158	June 30	June 15-July 15.
Total	11,048	2,350	8,698	.....	
South Dakota:					
Bennett	267	267	.....	.....	
Corson	100	100	.....	.....	
Gregory	266	266	.....	.....	
Mellette	267	267	.....	.....	
Shannon	266	266	.....	.....	
Todd	267	267	.....	.....	
Tripp	266	266	.....	.....	
Washabaugh	267	267	.....	.....	
Total	1,966	1,966	.....	.....	
Tennessee:					
Bedford	100	100	.....	.....	
Campbell	130	130	.....	.....	
Coffee	108	108	.....	.....	
Dyer	249	.....	249	Oct. 11	Sept. 24-Nov. 4.
Gibson	194	.....	194	May 28	May 3-Nov. 18.
Knox	161	161	.....	.....	
Lauderdale	214	.....	214	Oct. 14	Sept. 17-Nov. 30.
Madison	100	100	.....	.....	
Putnam	100	100	.....	.....	
Shelby	618	618	.....	.....	
Sullivan	207	207	.....	.....	
Sumner	314	.....	314	May 26	May 1-June 10.
Washington	185	185	.....	.....	
Total	2,680	1,709	971	.....	
Texas:					
Armstrong	750	.....	750	June 20	June 5-July 15.
Atascosa	700	600	100	.....	
Austin	225	.....	225	Aug. 20	Aug. 1-Sept. 1.
Bailey	3,150	.....	3,150	July 25	June 25-Dec. 1.
Baylor	150	.....	150	Oct. 1	Sept. 10-Nov. 15.
Bee	300	300	.....	.....	
Bell	450	450	.....	.....	
Bexar	15,000	15,000	.....	.....	
Borden	150	.....	150	July 20	June 20-Dec. 1.
Bowie	450	450	.....	.....	
Brazoria	110	110	.....	.....	
Brazos	438	250	188	Aug. 25	Aug. 10-Sept. 10.
Briscoe	750	.....	750	Nov. 15	June 25-Dec. 1.
Brooks	750	750	.....	.....	
Burleson	110	110	.....	.....	
Caldwell	1,050	600	450	Sept. 5	Aug. 10-Sept. 20.
Calhoun	4,000	2,400	1,600	Aug. 15	July 25-Aug. 20.
Cameron	24,000	15,000	9,000	do	July 1-Aug. 1
Carson	2,572	1,672	900	June 20	June 5-July 15
Castro	5,347	.....	5,347	July 25	June 25-Dec. 1
Childress	2,500	.....	2,500	Nov. 1	June 15-Nov. 30.
Cochran	900	.....	900	July 20	June 20-Dec. 15.
Coleman	120	120	.....	.....	
Collingsworth	900	.....	900	Nov. 10	June 15-Nov. 30.
Comal	120	120	.....	.....	
Comanche	1,394	982	412	.....	
Cottle	890	140	750	Nov. 1	Do.

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COUNTIES HAVING APPROXIMATELY 100 OR MORE SEASONAL AGRICULTURAL WORKERS AND NONWORKING FAMILY DEPENDENTS THAT EITHER MIGRATED INTO, OR RESIDED IN, THE AREA AT SOME POINT DURING 1967-68—Continued

State and county	Total	Number home-based in county [1]	Number migrating into county [2]	Date of peak	Estimated span of Crop season
Texas—Continued					
Crosby	6,300	1,000	5,300	July 16	June 15-Dec. 15.
Dallam	900	300	600	June 25	June 15-July 15.
Dawson	1,070	170	900	July 20	June 20-Dec. 1.
Deaf Smith	1,770	270	1,500	do	May 15-Dec. 15.
De Witt	200	200		July 16	June 15-Dec. 15.
Dickens	1,470	1,000	470	May 15	Apr. 15-Nov. 30.
Dimmit	1,800	1,500	300	Nov. 10	June 15-Nov. 30.
Donley	150		150		
Duval	450	450			
Ellis	300		300	Sept. 20	Sept. 1-Oct. 10.
El Paso	900	900			
Falls	270	270			
Fisher	450		450	Nov. 11	Sept. 15-Dec. 15.
Floyd	4,200	500	3,700	do	Aug. 15-Sept. 25.
Fort Bend	1,020	120	900	Aug. 10	Aug. 1-Aug. 31.
Frio	750	750			
Gaines	375		375	July 25	June 25-Dec. 1.
Garza	600		600	July 16	Sept. 20-Dec. 15.
Goliad	1,250	700	550		
Gonzales	2,759	1,309	1,450		
Grayson	225		225	Sept. 15	Sept 1-Oct. 1.
Grimes	368	180	188	Aug. 25	Aug. 10-Sept. 10.
Guadalupe	300	300			
Hale	7,357	600	6,757	Nov. 1	June 25-Dec. 1.
Hall	2,500		2,500	do	June 15-Dec. 15.
Hansford	150		150	June 30	June 10-July 15.
Hardeman	600		600	Oct. 1	Sept.10-Nov. 30.
Harris	600	600			
Hartley	300		300	June 25	June 15-July 15.
Haskell	720	120	600	Oct. 1	June 10-Dec. 15.
Hays	808	600	208		
Hemphill	150		150	June 30	June 10-July 15.
Hidalgo	37,600	37,500	100	Aug. 15	July 1-Aug. 1.
Hill	300		300	Sept. 5	Aug. 20-Sept. 30.
Hockley	1,800	300	1,500	July 20	June 20-Dec. 15.
Houston	170	170			
Hudspeth	316	120	196		
Jackson	300		300	Aug. 20	Aug. 1-Aug. 20.
Jim Hogg	1,120	100	1,020		
Jim Wells	2,100	1,050	1,050	July 30	July 20-Aug. 15.
Jones	190	190			
Karnes	600	600			
Kleberg	900	900			
Knox	500		500	Oct. 1	June 10-Dec. 15.
Lamar	130	130			
Lamb	4,000	180	3,820	July 20	June 25-Dec. 1
La Salle	3,000	2,400	600		
Lipscomb	150		150	July 1	June 15-July 20.
Live Oak	1,125	925	200		
Lubbock	7,907	600	7,307	July 16	June 15-Dec. 15.
Lynn	1,030	130	900	do	Do.
Matagorda	150		150	Aug. 15	July 28-Aug. 20.
Maverick	6,200	6,200			
McLennan	1,200	1,200			
Medina	750	750			
Menard	150	150			
Milam	150		150	Aug. 31	Aug. 15—Sept. 15.
Mitchell	750		750	Nov. 1	Sept. 15—Dec. 15.
Moore	450		450	June 20	June 5-July 15.
Motley	150		150	Nov. 1	June 15-Nov. 30.
Nueces	8,400	7,500	900	July 30	July 20-Aug. 15.
Ochiltree	450		450	July 1	June 15-July 20.
Oldham	900		900	June 20	June 10-July 15.
Parmer	2,250		2,250	July 25	June 25-Dec. 1.
Randall	750		750	June 20	June 10-July 15.
Refugio	300		300	July 30	July 20-Aug. 15.
Robertson	150		150	Aug. 25	Aug. 10-Sep. 15.
Runnels	150		150	Oct. 16	Aug. 25-Nov. 30.
San Patricio	3,900	3,000	900	July 30	July 20-Aug. 15.
Scurry	440	140	300	Nov. 1	Sept. 15-Dec. 15.
Sherman	600		600	June 25	June 5-July 15.
Starr	4,794	3,300	1,494		
Swisher	1,300	100	1,200	Nov. 15	June 25-Dec. 1.
Tarrant	300	300			
Taylor	230	230			
Terry	1,445	170	1,275	July 16	June 15-Dec. 15.
Tom Green	150	150			

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COUNTIES HAVING APPROXIMATELY 100 OR MORE SEASONAL AGRICULTURAL WORKERS AND NONWORKING FAMILY DEPENDENTS THAT EITHER MIGRATED INTO, OR RESIDED IN, THE AREA AT SOME POINT DURING 1967-68--Continued

State and county	Total	Number home-based in county [1]	Number migrating into county [2]	Date of peak	Estimated span of Crop season
Texas—Continued					
Travis	1,800	1,800	.....	.....	
Uvalde	1,500	1,500	.....	.....	
Val Verde	1,500	1,500	.....	.....	
Victoria	600	300	300	Aug. 20.....	Aug. 1-Aug. 20.
Webb	7,701	7,500	201	.....	
Wharton	3,750	3,000	750	Aug. 20.....	May 10-Aug. 20.
Wilbarger	150	.....	150	Oct. 1.....	Sept. 10-Dec. 1.
Willacy	300	.....	300	Aug. 15.....	July 5-Aug. 1.
Williamson	1,200	750	450	Aug. 31.....	May 20-Sept. 15.
Wilson	600	600	.....	.....	
Yoakum	2,700	864	1,836	July 20.....	June 20-Dec. 15.
Zapata	3,960	600	3,360	.....	
Zavala	6,000	5,700	300	May 1?.....	Apr. 15-Nov. 30.
Total	239,796	143,492	96,304	.....	
Utah:					
Beaver	200	.....	200	Oct. 13.....	May 10-Oct. 31.
Box Elder	2,277	.....	2,277	Aug. 20.....	May 5-Oct. 10.
Cache	120	.....	120	.....do.....	May 10-Sept. 20.
Carbon	142	.....	142	.....	
Davis	315	.....	315	Aug. 20.....	May 10-Oct. 10.
Duchesne	530	530	.....	.....	
Garfield	160	.....	160	Oct. 10.....	Sept. 15-Oct. 31.
Piute	31	.....	31	.....	
Salt Lake	184	.....	184	June 1.....	May 5-Oct. 15.
San Juan	1,235	1,215	20	.....	
Sanpete	100	.....	100	June 1.....	May 15-Oct. 15.
Sevier	100	.....	100	.....do.....	Do.
Uintah	530	530	.....	.....	
Utah	1,175	.....	1,175	July 10.....	May 5-Oct. 31.
Wayne	90	.....	90	.....	
Washington	650	.....	650	.....	
Weber	446	.....	446	Aug. 15.....	May 5-Oct. 15.
Total	8,285	2,275	6,010	.....	
Virginia:					
Accomack	3,707	.....	3,707	July 30.....	Apr. 1-Nov. 15.
Albemarle	30	.....	30	.....	
Augusta	60	.....	60	Oct. 15.....	Aug. 15-Nov. 1
Botetourt	15	.....	15	Sept. 30.....	July 30-Nov. 1.
Chesapeake City	200	.....	200	May 31.....	May 1-Aug. 13.
Clarke	298	.....	298	Sept. 30.....	June 30-Nov. 15.
Fauquier	30	.....	30	.....	
Frederick	1,553	.....	1,553	Sept. 30.....	Do.
Loudoun	16	.....	16	.....	
Madison	28	.....	28	.....	
Northampton	3,707	.....	3,707	July 30.....	Apr. 1-Nov. 15.
Rappahannock	40	.....	40	Sept. 30.....	July 30-Nov. 15.
Roanoke	200	.....	200	.....do.....	July 30-Nov. 1.
Shenandoah	60	.....	60	.....	
Virginia Beach City	200	.....	200	July 15.....	May 1-Nov. 1
Warren	27	.....	27	.....	
Total	10,171	.....	10,171	.....	
Washington:					
Adams	462	.....	462	May 15.....	Apr. 1.-Oct. 31.
Benton	1,820	.....	1,820	.....do.....	Mar. 1-Oct. 31.
Chelan	6,896	.....	6,896	Sept. 30.....	June 10-Oct. 31.
Columbia	980	.....	980	June 15.....	Apr. 15-July 31.
Douglas	5,825	.....	5,825	Sept. 30.....	June 10-Oct. 31.
Ferry	209	209	.....	.....	
Franklin	910	.....	910	June 15.....	Apr. 1-Oct. 31.
Grant	1,540	.....	1,540	May 15.....	Do.
Kitsap	280	.....	280	June 30.....	June 1-July 15.
Klickitat	350	.....	350	Sept. 15.....	Aug. 25-Oct. 10.
Okanogan	2,473	209	2,264	Sept. 30.....	June 1-Oct. 31.
Pierce	511	.....	511	July 15.....	June 15-Oct. 1.
Skagit	4,688	.....	4,688	.....do.....	June 1-Aug. 15.
Spokane	700	.....	700	Sept. 15.....	June 15-Oct. 15.
Stevens	209	209	.....	.....	
Walla Walla	840	.....	840	June 15.....	Apr. 15-July 31.
Watcom	1,776	.....	1,776	July 15.....	July 1-Sept. 15.
Yakima	1,624	209	1,415	May 15.....	Mar. 1-Oct. 31.
Total	32,093	836	31,257	.....	

See footnotes at end of table, p. 113

COUNTIES HAVING APPROXIMATELY 100 OR MORE SEASONAL AGRICULTURAL WORKERS AND NONWORKING FAMILY DEPENDENTS THAT EITHER MIGRATED INTO, OR RESIDED IN, THE AREA AT SOME POINT DURING 1967-68—Continued

State and county	Total	Number home-based in county [1]	Number migrating into county [2]	Date of peak	Estimated span of Crop seaton
West Virginia:					
Berkeley	400	.....	400	Oct. 1	June 1-Nov. 15.
Hampshire	323	.....	323	Oct. 15	Aug. 15-Oct. 30.
Jefferson	274	.....	274	Oct. 1	July 20-Nov. 15.
Morgan	400	.....	400	.....	
Total	1,397	.....	1,397	.....	
Wisconsin:					
Columbia	325	.....	325	Aug. 15	May 1-Oct. 31.
Dodge	675	.....	675	July 15	June 1-July 31.
Door	4,900	.....	4,900	July 31	May 1-Oct. 31.
Fond du Lac	308	.....	308	June 30	May 1-Sept. 30.
Jefferson	343	.....	343	July 15	May 1-Oct. 31.
Kenosha	294	.....	294	June 30	May 1-Oct. 31.
La Crosse	245	.....	245	Aug. 15	July 15-Aug. 31.
Marquette	749	.....	749	June 30	May 1-Sept. 30.
Oconto	1,176	.....	1,176	Aug. 31	May 1-Oct. 31.
Outagamie	490	.....	490	Aug. 15	July 1-Aug. 31.
Racine	490	.....	490	...do...	May 1-Oct. 31.
Waukesha	392	.....	392	July 15	June 15-Oct. 15.
Waushara	8,700	.....	8,700	Aug. 15	May 1-Oct. 31.
Winnebago	600	.....	600	...do...	May 1-Oct. 31.
Total	19,687	.....	19,687	.....	
Wyoming:					
Big Horn	722	.....	722	June 15	May 10-July 20.
Fremont	1,545	545	1,000	...do...	May 10-July 20.
Goshen	1,785	.....	1,785	...do...	May 10-July 20.
Park	680	.....	680	...do...	May 10-July 20.
Platte	170	.....	170	...do...	May 10-July 20.
Sheridan	119	.....	119	...do...	May 10-July 20.
Washakie	978	.....	978	...do...	May 10-July 20.
Total	5,999	545	5,454	.....	

[1] This column includes migrants and family dependents located in a county while not pursuing seasonal agricultural work elsewhere, and includes family dependents who may, or may not, migrate with the worker in a given year.

[2] This column includes migrants and family dependents who establish a temporary residence while performing seasonal agricultural work at 1 or more locations away from the place he calls home or homebase. It does not include "day haul" agricultural workers whose travels are limited to work areas within 1 day of his work location.

Source: U.S., Senate, Committee on Labor and Public Welfare, Subcommittee on Migratory Labor, 1969 Report The Migratory Farm Labor Problem in the United States, 91st Congress, 1st Session, 1969, Report No. 91-83, Appendix A, pp. 115-129. The table is based on estimates compiled by the U.S., Dept. of Health, Education, and Welfare, Public Health Service.

APPENDIX B

BACKGROUND INFORMATION ON MIGRATORY AND SEASONAL AGRICULTURAL WORKERS

General Characteristics

Each year, more than two million people are hired to meet the short-term, seasonal labor requirements of U.S. agriculture.[1] Roughly half of them do that kind of work less than 25 days per year.[2] The hired seasonal work force appears composed largely of people on the fringes of the general U.S. labor market. Nearly half are between the ages of 14 and 20 years.[3] More than half are people who normally are not employed, such as students and housewives.[4] Although they earn an average of about $12 per day when they work, their total annual earnings from all sources average only $1,580.[5]

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1 The exact number of seasonal workers, in the sense used here, is unknown. Current Population Survey data, collected by the U.S. Census Bureau, and published by USDA, show that 2,265,000 persons performed farm wage work less than 250 days per year. Robert C. McElroy, The Hired Farm Working Force of 1971: A Statistical Report (Agricultural Economic Report No. 222; Washington, D.C.: Economic Research Service, U.S. Dept. of Agriculture, March, 1972), p. 17.

A more suitable definition is used by the Census of Agriculture. However, their count of 963,294 is unusable, due both to over-counting and under-counting. The under-counting, according to USDA staff interviewed by this IRA Project Director, results from reliance on data from employers, who are often reluctant to report seasonal employees they may have employed under possibly illegal conditions. U.S. Bureau of the Census, Census of Agriculture, 1969, Vol. II: General Report, Chapter 4: Equipment, Labor, Expenditures, Chemicals (Washington, D.C.: U.S. Government Printing Office, 1973), p. 42.

2 McElroy, loc. cit.

3 Ibid.

4 Ibid., p. 15

5 Ibid.

Yet, within that work force, there is a smaller number of people for whom seasonal agricultural employment is the main source of income for themselves and their families. Surprisingly, little statistical information is available on this group, in spite of the large amount of data collected by the federal government on the agricultural work force.[6] Statistics published by the U.S. Dept. of Agriculture (USDA) suggest that the group numbers about 600,000.[7] Other authoritative sources place the figure much higher, often in excess of one million.[8]

The study described in the preceding pages is concerned just with the workers and their dependents for whom seasonal agricultural employment is a livelihood. This group is generally recognized as constituting the

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6 In addition to the sources cited herein, the Project Director personally sought statistical information from the research staffs of USDA's Economic Research Service, OEO's Migrant Division, PHS's Migrant Health Project, RSA liaison for this study, HEW's Office of Spanish Surnamed Affairs, HEW's Office of the Assistant Secretary for Program Planning and Evaluation (ASPPE), DOL's Rural Manpower Service, and The Counsel to the U.S. Senate Subcommittee on Migratory Labor.

7 Including "seasonal," "regular," and "year-round" workers, there were 611,000 hired farm workers whose chief activity was farm work, according to McElroy, loc. cit.

8 The larger estimates include dependents, many of whom also work in the field alongside the principal wage earner. There are more than one million seasonal workers and dependents who migrate, according to various estimates summarized by the U.S., Senate, Committee on Labor and Public Welfare, Subcommittee on Migratory Labor, 1969 Report: The Migratory Farm Labor Problem in the United States, 91st Congress, 1st Session, 1969, Report No. 91-83, pp. 1 and 111.

The Office of Economic Opportunity (OEO) estimates that 5,000,000 migratory and seasonal farm workers are eligible for their services, according to the U.S., Comptroller General, Report to Congress: Impact of Federal Programs to Improve the Living Conditions of Migrant and Other Seasonal Farmworkers: Department of Agriculture, Department of Health, Education and Welfare, Department of Labor, Office of Economic Opportunity (B-177486; Washington, D.C.: U.S. General Accounting Office, February 6, 1973), pp. 1 and 24.

poorest of the nation's working poor.[9] A relatively high proportion of this population are members of racial or ethnic minorities.[10] They generally reside in rural areas, and have little if any work training or experience other than manual labor.[11] On the average, they have less than a grammar school education.[12]

Seasonal agricultural employment is concentrated in labor intensive crops requiring large amounts of short-term manual labor, such as for harvests or thinning. Although USDA's statistics concern just people who work on farms, other definitions often include other seasonal agricultural workers, such as those who work in canneries

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9 This was stated by a large number of witnesses recorded by the U.S., Senate, Committee on Labor and Public Welfare, Subcommittee on Migratory Labor, Hearings: Migrant and Seasonal Farmworker Powerlessness, 91st Congress, 1st and 2nd Sessions (Printed for the use of the Committee on Labor and Public Welfare, 1970-1971), parts 1 through 8.

10 All available estimates of racial and ethnic characteristics are based on non-systematic observation, or surveys using non-probablistic sampling. (C.f., "Related Literature and Research" in this report.)

The Current Population Survey does use probablistic samples, but does not publish breakdowns by ethnicity; race is shown only as "White" (including Chicanos) and "Negro and other races," according to McElroy, op. cit., pp. 24-29, and interviews of USDA employees by the Project Director.

However, McElroy's finding that "Negro and other races" earn less than "Whites" might suggest the existence of a low-income sub-group with a higher proportion of minority group members; in McElroy, op. cit., p. 15.

11 U.S., Senate, Hearings. . . .

12 Ibid.

or packing sheds.[13] Many of the jobs requiring seasonal workers are very demanding physically. Crop guides quoted by a U.S. Senate subcommittee report illustrate the requirements:[14]

> Beans: The picker must have the judgment to pick the mature beans and leave the younger beans for later picking. Crawling, crouching, stooping, walking, and kneeling are the physical demands.
>
> Tomatoes: The picker. . . works in a stooping position.
>
> Potatoes: The potato digger. . . must exercise care not to leave potatoes in the rows. Works in a kneeling position and progresses along the rows by crawling. . . . A good worker should pick from 75 to 150 field crates (60 pounds each) per day.

In addition, workers are frequently exposed to serious health or safety hazards, often without their knowledge. Poisonings have been a substantial, but incompletely assessed, cause of health problems, due to weak and incomplete regulations governing the use of pesticides by growers. Farm machinery is also a substantial source of injuries and death. The prolonged demands of heavy

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13 E.g., RSA's definition of migrants: "A 'migratory agricultural worker' means a person who occasionally or habitually leaves his place of residence on a seasonal or other temporary basis to engage in ordinary agricultural operations or services incident to the preparation of farm commodities for the market in another locality in which he resides during the period of such employment," as stated in U.S., Dept of Health, Education and Welfare, Social and Rehabilitation Service, "Vocational Rehabilitation Programs and Activities: Rules and Regulations," in U.S., Archives, Federal Register, Vol. 34 (October 17, 1969), p. 16824. (Emphasis added.)

RSA liaison for this project indicate a similar definition is being considered for seasonal workers. The population thus defined would exceed, by an unknown amount, the number of seasonal workers included in McElroy's Current Population Survey data (op. cit.)

14 Oasis, Vol. 13, No. 12 (December, 1967), p. 4, as quoted by U.S., Senate, Report. . ., p. 3 and 111.

physical labor, inadequate heating, sanitation and water at work sites and camps, and isolation from medical care, all have taken a heavy toll reflected in part by life spans well below the national average.[15]

Migration

This Project Director estimates that roughly one-third of the people who earn most of their living from paid seasonal agricultural employment are seasonal migrants. They typically spend anywhere from one to eight months per year living away from their homes working one or more seasonal or temporary jobs. The Senate subcommittee report mentioned above summarizes migrants' work as being extremely "unattractive":[16]

> Farm work may require continual stooping or lifting, be dirty and exhausting, or be monotonous and boring. It may call for continuous effort under conditions of extreme heat or cold. The work may be in an isolated area away from town, and away from the customary paths of migrant and casual labor. . . . Workers may be housed, fed, transported, and worked in gangs with a minimum of thought given to their comfort.

The report describes a wide range of problems faced by migrants, such as extremely sub-standard housing, severe unmet health needs, hazardous working conditions, susceptibility to exploitation by employers and crew leaders, and a variety of other problems related to poverty and to minority status due to race, ethnicity and language.

Migration is attributed mainly to economic pressures. Labor intensive crops require more workers than some local labor markets can supply at wages

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15 U.S., Senate, Hearings. . . . , Part 6: Pesticides and the Farmworker.

16 U.S., Senate, Report. . . . , pp. 2-3.

offered.[17] Growers then frequently rely on seasonal farm workers willing and able to travel beyond daily commuting distance, in order to take temporary jobs paid in piece rates, hourly rates, or percentages of produce. Such agreements are often arranged through labor contractors, crew leaders, or, in a small percentage of cases, governmental agencies. Labor contractors often contract with the grower, or buy the crop unharvested, and then employ the workers directly. Arrangements vary widely.

Workers agreeable to such terms and conditions come from rural areas with widespread poverty and high unemployment. Since the mid-nineteenth century, there have been nation-wide patterns of seasonal migration. Presently, one-third of the migratory work force is estimated to travel beyond the borders of their home states, in the course of travelling from one temporary job to another.

In 1965, USDA issued a special report estimating migrants to comprise 15% of the total U.S. hired farm work force, seasonal and otherwise.[18] Subsequent annual statistical reports show a decline in migrants being hired, down to 7% in 1971.[19] The absolute number of migrants is

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17 Local seasonal labor shortages are attributable to concentrated farm land ownership. Ownership of large tracts, as opposed to small, family-operated farms, limits resident population density, so seasonal labor must be imported, according to the "Statement by Paul S. Taylor Submitted to Senate Subcommittee on Migratory Labor, August 20, 1970," in U.S., Senate, Hearings. . . . , Part 8-C (July 24, 1970), pp. 6252-6298.

18 Avra Rapton, Domestic Migratory Farmworkers: Personal and Economic Characteristics (Agricultural Economic Report No. 121; Washington, D.C.: Economic Research Service, U.S. Dept. of Agriculture, September, 1967), p. 1.

19 McElroy, reports by the same title as op. cit., for 1967 through 1971, Agricultural Economic Reports 148, 164, 180, 201 and 222.

a matter of controversy, partly because of the variety of definitions in use. Authoritative estimates range from 172,000 workers (only those individuals actually hired who were above 14 years of age) to one million or more (including dependents).[20]

Migrants' travel patterns have been described as three major streams: east coast, mid-continent, and west coast.[21] In fact, the streams are not rigidly followed, and there is considerable overlap and variation.[22]

The east coast stream begins in Florida, and moves northward to serve agriculture in Georgia, South and North Carolina, Virginia, West Virginia, Maryland, Pennsylvania, New Jersey, New York, Massachusetts, Vermont, and New Hampshire. It also extends northwestward through Georgia to serve Tennessee, Kentucky, Indiana, and Ohio. The migrant work force consist primarily of Puerto Ricans and Blacks from southern states. Also found are Blacks from the West Indies, Mexicans (citizens of Mexico), and Chicanos ("Mexican-Americans") from Texas, Florida, and California.

The mid-continent stream extends from South Texas, both eastward and westward near the southern U.S. border, and northward into the midwest and adjacent areas. The mid-continent stream is actually a combination of several overlapping streams, with extensive cross-over, and is substantially larger than either of the other two streams on the coasts. States served include the following: Louisiana, Mississippi, Alabama, Georgia, Florida, and on into the east coast stream; Arkansas, Missouri, Illinois, Indiana, Ohio, Michigan and Wisconsin; Oklahoma, Kansas,

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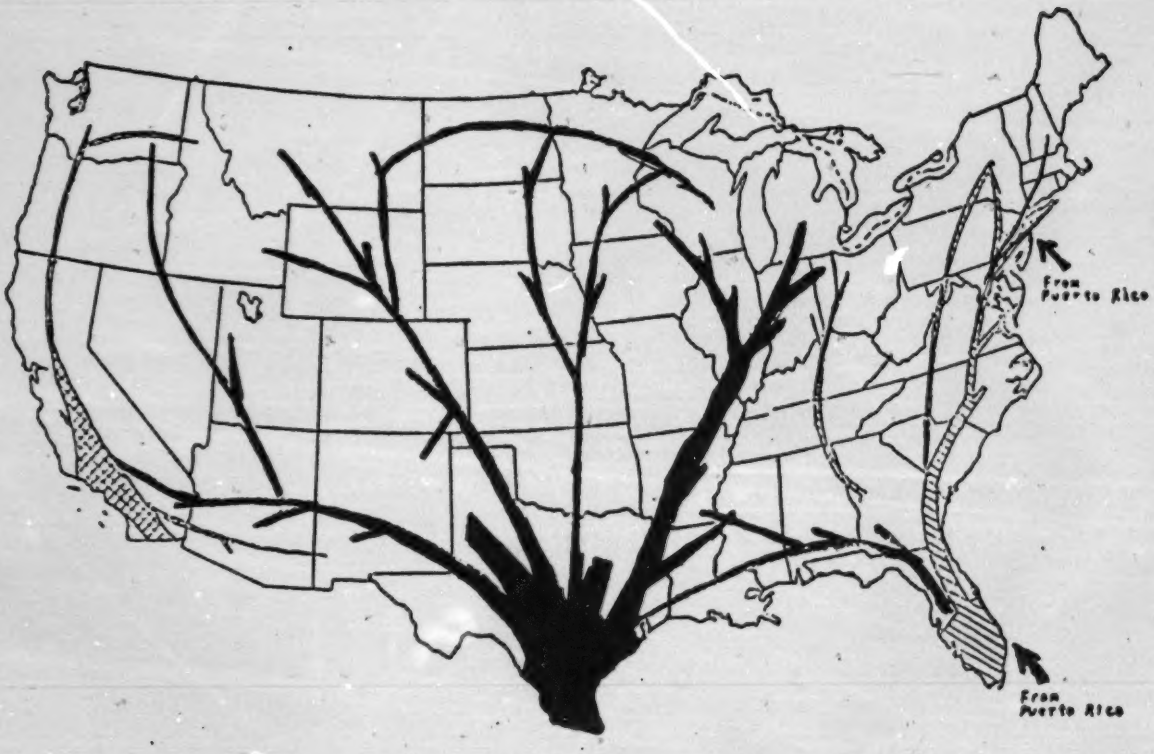
20 The first figure is from McElroy, op. cit., Report 222, p. 10. The second is from U.S., Senate, Report. . . , pp. 1 and 111.

21 U.S., Department of Health, Education and Welfare, Public Health Service, and U.S., Department of Labor, Bureau of Employment Security, Domestic Agricultural Migrants in the United States (Public Health Service Publication No. 540; Washington, D.C.: U.S. Government Printing Office, October, 1966).

22 Personal interviews by the Project Director with members and leaders of farmworker community service organizations along the mid-continent stream in 1971.

TRAVEL PATTERNS OF SEASONAL MIGRATORY AGRICULTURAL WORKERS



This map shows the major directions of the northward migratory movement of domestic agricultural workers. The movement is reversed as the crop season ends in the northern States and the workers drift back to their home-base areas—for many of them, southern California, Texas, and Florida.

Southern Negroes predominate among the agricultural migrants in the East Coast States and U.S. citizens of Mexican ancestry in the other States. In addition, low-income southern white families, Puerto Ricans, and Indians are found in the domestic agricultural migrant population.

Source: U.S., Department of Health, Education, and Welfare, Public Health Service, op. cit.

Iowa, Nebraska, Minnesota, North and South Dakota; Colorado, Wyoming, Montana and Idaho; Arizona, Utah, Oregon and Washington, and on into the west coast stream. That migrant work force consists primarily of Chicanos. Also found are Native Americans, Blacks from southern states, Mexicans, and Anglo-Americans.

The west coast stream extends from the southern regions of Arizona and California, northward through central and coastal California, and into Oregon, Washington and Idaho. It is composed principally of Chicanos and, to lesser extents, Filipinos (resident non-citizens and citizens) and Mexicans (including substantial numbers of immigrants).[23]

Although Florida, Texas and California have the largest concentrations of permanent residences or "home bases" of migratory agricultural workers, the bases of the entire migrant work force are more diffuse. Major sources of migrants include Puerto Rico, the Appalachian region, rural farming communities in North and South Carolina, Georgia, Alabama and Mississippi, Native American communities and reservations in the Southwestern states, and population centers near the U.S.-Mexico border.[24]

All home base communities are characterized by low family income, low standards of living and high unemployment.[25] For example, participation by residents of Mexico in U.S. labor markets near the border has suppressed wages in jobs open to the U.S. Spanish-speaking.[26] The nation's single largest source of migratory agricultural workers is the Rio Grande Valley, in South Texas, which is adjacent to the Mexican state of Tamaulipas. Over 85% of

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23 C.f. footnote 10.

24 U.S., Senate, Hearings. . . , Part 1: Who are the Migrants?

25 Ibid.

26 U.S., Senate, Hearings. . . . , Part 5: Border Commuter Labor Problem.

the population in the Valley consists of Spanish-speaking Chicanos.[27]

In addition to the major bases, small home base pockets or communities with high concentrations of migratory and seasonal agricultural workers, have developed along the streams in northern, "user" areas. These are typically settlements of migrants and former migrants, in rural areas near the fringes of some major, industrialized metropolitan area. Residents have generally relocated there after having worked nearby in previous years as migrants from one of the large, southern home bases.[28]

Foreign Workers

Seasonal migration patterns extend to a limited degree beyond U.S. borders. In 1968, U.S. agriculture employed nearly 15,000 migrants from the British West Indies and Canada.[29] And, although the Bracero program ended with the expiration of Public Law 78 in 1964, Mexican nationals continue to participate in the U.S. seasonal agricultural labor market. Many Mexicans have official permanent resident status or citizenship in the U.S., but continue to live in Mexico, where the lower cost of living increases the value of earnings from U.S. agriculture.[30]

In addition, there are anywhere between 39,000 and 140,000 "green-carders"; i.e., Mexicans

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27 A Job and Skill Research Development Study of 16 Counties of the Rio Grande Valley of Texas (Washington, D.C.: Interstate Research Associates, 1970).

28 [Richard J. Bela, Michael E. Cortés, and Joan Porter], The Chicano Migrant Farm Worker Community in Texas, the Great Lakes States and Florida (Washington, D.C.: Interstate Research Associates, February, 1972), pp. 44-47.

29 U.S., Senate, Report. . . . , p. 11.

30 U.S., Senate, Hearings. . . , loc. cit. Also, personal observation and interviews by the Project Director, 1970-74, in the Rio Grande Valley and the mid-continent stream.

who hold immigrant alien status but in fact maintain home bases in Mexico while commuting or migrating to seasonal jobs in the U.S.[31] And, there are an unknown number of "wetbacks" or Mexicans in the U.S. illegally, employed in U.S. agriculture and other industries.

The impact of foreign labor on the U.S. agricultural labor market is suggested by trends in the apprehension of illegal aliens. In 1964, 178,000 foreign agricultural workers were brought in under the Bracero program, while an additional 43,844 Mexicans were arrested by the U.S. Immigration and Naturalization Service (INS) for being in the country illegally.[32] After the Bracero program expired at the end of the year, the number of "illegals" apprehended climbed sharply. By 1971, the arrest rate had reached over 340,000 per year.[33]

Labor Market Shrinkage

USDA reports that the number of farm workers migrating each year has been declining since 1967.[34] In 1971, 172,000 farm workers migrated, compared to 466,000 in 1965.[35] The decrease in migration is attributable in large part to mechanization of harvests

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31 U.S., Senate, Report. . . , pp. 62-63.

32 Ibid., p. 62; and U.S., Dept. of Justice, Immigration and Naturalization Service, Annual Report, 1964 (Washington, D.C.: U.S. Government Printing Office, 1965).

33 INS Annual Reports for 1965 through 1971. For a history of the use of Mexican labor in U.S. Agriculture, see Julian Samora, Los Mojados: The Wetback Story (Notre Dame: University of Notre Dame Press, 1971).

34 McElroy, op. cit., p. ii.

35 Ibid., and Rapton, loc. cit.,

and related technological developments.[36] However, the dramatic decrease in migration is not the result of a comparable decrease in jobs for migrants. Rather, the decrease in migration appears to have resulted from disruption of established migrant itineraries by mechanization at some places along the streams, resulting in spot labor shortages in other areas, and increased unemployment in migrants' home base communities. Some observers suggest that the decrease has resulted from increased access to the USDA Food Stamps program, and absorption of migrants into other labor markets. In the absence of systematic research on the subject, the true nature of the decline in migration remains a matter of controversy.[37]

Nevertheless, farm mechanization promises to greatly decrease the number of jobs for seasonal agricultural workers. The mechanization of harvesting grains, hay, soybeans, cotton, potatoes, peas, corn and processed tomatoes had an historic impact on farm employment patterns, and has been associated with massive rural to urban migration throughout the mid-twentieth century. Urban poverty and unrest is attributable in large part to the displacement of manual labor in agriculture.[38]

Similar projections are now being made for

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36 Daniel W. Sturt, "The Rural Manpower Scene," Fruit and Vegetable Harvest Mechanization: Manpower Implications, ed. B. F. Cargill and G. E. Rossmiller (Michigan State University Rural Manpower Reports, No. 17; East Lansing, Mich.: Michigan State University Rural Manpower Center, 1969), p. 180.

Essentially the same conclusion may be reached from several other of the papers included in the report by Cargill and Rossmiller.

37 The Project Director's impression of the nature of the decline in migration, results primarily from interviews with farm worker organization members along the mid-continent stream in 1970 through 1973, and with various staff members in OEO, DOL, USDA, and HEW.

38 The relationship between social and economic problems in cities to mechanization of grain and cotton harvests is described by Daniel R. Fusfeld, "The Basic Economics of the Urban and Racial Crises," Review of Black Political Economy, Vol. 1 (New York: n.d., No. 1), pp. 58-85.

labor intensive fruit and vegetable crops. In 1968, 50% of the nation's vegetable crops was harvested mechanically. USDA estimates that 75% will be mechanized by 1975. After taking into consideration increased production, the total number of hours required by the vegetable industry will have been reduced by 27 per cent.[39] One would expect the reduction to be greater when considering just jobs requiring manual labor. In the fruit and nut industry, man-days required per acre is expected to decrease by 19% during the same period. Although expanded production is expected to limit the net reduction of total labor to just 3%, the manual labor market is expected to shrink by a much greater factor.[40]

Other factors besides crop mechanization technology are expected to accelerate manual seasonal labor market shrinkage. Hand-picked crops grown in the U.S. are expected to succumb to price competition from imported fruits and vegetables produced in countries where manual labor is less costly.[41] The tastes of retail grocery shoppers are expected to be shifted by a variety of pressures, so that while total consumption increases, the demand for fresh produce will decrease.[42] Horticultural research is expected to facilitate mechanization by producing more strains that can tolerate machine handling, and by rescheduling crops to reduce

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39 Velmar W. Davis, "Labor or Capital -- The Road Ahead," Fruit and Vegetable Harvest Mechanization: Manpower Implications. . . , pp. 130-35.

40 Ibid., and Michael Cortés, "Displacement of Migrant Farm Labor by Mechanization of Agriculture: A Review Paper" (Washington: Interstate Research Associates, October 27, 1971), pp. 4-6 and 8-10.

When compared to shrinkage of the agricultural labor market in general, shrinkage of the market for manual labor will be much more dramatic, according to James W. Becket, "Agricultural Labor Skills -- Past, Present, and Future," in Fruit and Vegetable Harvest Mechanization: Manpower Implications. . . .

41 G. E. Rossmiller, (Introduction), Fruit and Vegetable Harvest Mechanization: Manpower Implications. . . . , p. 3.

42 Carl W. Hall, "Potentials in Engineering Technology," Fruit and Vegetable Harvest Mechanization: Manpower Implications . . . , p. 69.

the seasonality of labor demands.[43] Ownership of farm land is expected to become more concentrated, thereby making mechanization more economical.[44]

As mentioned earlier, little statistical data are available on seasonal agricultural workers primarily dependent upon that type of employment. The impact of labor market trends on this group can only be guessed. Structural unemployment is expected to increase, given the limited education and skills of this group. Minority group status, with respect to race, ethnicity and language, is expected to exacerbate unemployment. Seasonal migration may be further discouraged by increasing incidents of families being stranded mid-stream, due to unanticipated job losses associated with mechanization. Permanent rural to urban migration is expected to continue, much of it in the form of "settling out" along the migrant streams. However, the effects of permanent migration may be offset by inability to secure employment in urban areas, continued high birth rates in rural home base communities, and continued immigration from Mexico into bases near the U.S.-Mexico border.[45]

Federal Policy

Issues concerning the welfare of migrant farm workers have had re-occurring national prominence for

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[43] Cargill and Rossmiller, op. cit., present several papers dealing with horticultural technology and applications in the near future, especially in pp. 9-82. E.g., R. Paul Larsen, "Horticultural Technology in Fruit Production," in ibid.

[44] Kenneth R. Farrell, "The International Angle," Fruit and Vegetable Harvest Mechanization: Manpower Implications. . . . , pp. 161-62.

[45] The Project Director's impressions concerning the impact of labor market trends, are based on the sources mentioned in footnote no. 37, in addition to the literature cited. It must be emphasized that there is insufficient empirical data available to systematically support or refute these impressions.

more than thirty years. Within the past decade that concern has expanded to include impoverished seasonal farm employees who do not migrate. National exposure has been through newspaper articles, special news reports on television networks and local stations, congressional hearings, and other media.

One of the first major steps toward legislation to ameliorate migrants' living and working conditions was taken in 1940, with the appointment of the Select Committee to Investigate the Interstate Migration of Destitute Citizens, by the U.S. House of Representatives. The Committee's report discussed such problem areas as depressed economic conditions in home base areas, exploitative labor contracting and transportation arrangements, conditions at camps, health, education, and exemptions from protections of such programs as Social Security, the National Labor Relations Act, and the Fair Labor Standards Act.[46]

Ten years later, the problems of migrants again received official recognition, through the apointment by President Truman of a Commission on Migratory Labor. In its more extensive report, the Commission identified the same kinds of problems described earlier by the House, including exemption from protective legislation. In addition, the Commission submitted a large number of specific recommendations concerned with the adverse effects of foreign labor on the domestic migratory work force, recruitment and hiring practices, inequitable wages, the need for collective bargaining, inadequate housing both at camps and home bases, working conditions, child labor, education, and the need for coordinated ameliorative programs at the national level.[47]

In spite of growing recognition of the problems of impoverished seasonal farm workers, no federal commitment developed prior to the 1960's. Critics had noted that, up to that time, "more funds were allocated for migratory

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[46] U.S., House of Representatives, Committee of the Whole House on the State of the Union, Select Committee to Investigate the Interstate Migration of Destitute Citizens, Preliminary Report, 76th Congress, 3rd Session, 1941, Report No. 3113, pp. 27-37.

[47] U.S., President's Commission on Migratory Labor, 1950-1951 (Truman), Migratory Labor in American Agriculture, the Commission's Report to the President (March 26, 1951), pp. 35, 66, 88, 103, 118, 134, 150, 159, 165, 171, 177.

birds than for migratory workers."[48] The beginning of Congressional action was marked by the creation of the Senate Subcommittee on Migratory Labor in 1959, which held public hearings and made legislative recommendations throughout the 1960's. Shortly after the Subcommittee had begun its work, CBS News broadcast a special documentary report, by Edward R. Morrow, Harvest of Shame, dealing with exploitation of migrants.[49] And it was during the decade of the 1960's that public awareness of the problems of seasonal farm workers was expanded by efforts to organize consumer boycotts by the United Farmworkers' Organizing Committee.

Much of the federal commitment to assist farm workers was authorized by the Economic Opportunity Act of 1964. Title III-B authorized funding of poverty program grantees to provide health, education, housing, day care, sanitation, and other services to migratory and seasonal farm workers.[50] Under the VISTA program, volunteers were assigned to work in migrant communities in sixteen states.[51] Rural legal assistance projects were funded to help secure wages and public services to which migrants were entitled.[52]

Among other legislative and administrative developments during the decade was the passage of the Migrant Health Act in 1962, which authorized the Public Health Service to fund state and local agencies and organizations to provide health and medical services to migrants.[53] In 1964, the "Bracero" program was allowed to expire, in order to relieve the domestic seasonal work force from competition from Mexican citizens.[54] Also in 1964, the Farm Labor Contractor Registration Act was passed in an effort to protect workers from exploitative hiring

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48 U.S., Senate, Report. . . , p. 41.

49 CBS Reports: Harvest of Shame, produced by David Lowe (New York: Columbia Broadcasting System, 1960), narrated by Edward R. Morrow.

50 U.S., Senate, Report. . . , pp. 40-6.

51 Ibid., pp. 46-7.

52 Ibid., pp. 47-50.

53 Ibid., pp. 25-7.

54 Ibid., p. 51.

practices.[55] In 1967, Title I of the Elementary and Secondary Education Act was amended to fund summer schools and other special remedial programs for the children of migrants, whose educations had been disrupted by migration, as well as impeded by other factors associated with poverty and minority group status.[56] Also in 1967, the Dept. of Labor (DOL) extended the protection of the Fair Labor Standards Act to children doing hazardous farm work, and stopped allowing employers to use aliens when domestic workers were on strike in a certified work dispute.[57]

As the 1960's progressed, appropriations for EOA-III-B and ESEA-I-"migrant Amendment" were increased. An increasing emphasis was placed on manpower development programs, in the face of loss of jobs to mechanization. And attempts were made to increase farm workers' influence on their own behalf, through community participation requirements in III-B grantee boards beyond those of other program grantees.[58]

In 1970, NBC News broadcast its own special report on migrants, in which Chet Huntley stated that after considering what Edward R. Morrow reported ten years earlier, "It is our observation that recent reforms have had little substantial effect on the conditions of their lives."[59] The same sort of conclusions were presented in more detail by a GAO report, which, after considering manpower, education, housing, health, and day care programs for migratory and seasonal farm workers, concluded that funding of

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55 Ibid., p. 81

56 Ibid., pp. 65-68

57 Ibid., pp. 77 and 64.

58 Boards responsible for administering local services for farm workers, under EOA Title III-B, were required to have at least 51% recipient community membership, while boards of other kinds of OEO Community Action Agencies were required to have just 33 per cent. Attempts to effect community participation by farm workers included training and technical assistance services provided by Interstate Research Associates, under contract to OEO to assist local grantees.

59 Migrant: An NBC White Paper, produced by Martin Carr (New York: National Broadcasting Company, 1970), narrated by Chet Huntley.

existing programs had been too limited and uncoordinated to achieve the desired impact on the target population.[60]

In fact, it seems impossible to assess the effects governmental action have had on the welfare of seasonal farm workers who depend on that work for most or all of their income. The number of such workers and their families is still unknown.[61] Attempts to draw valid samples in order to accurately characterize that population have been frustrated by methodological problems and lack of interest within government.[62] Program evaluations have relied on data supplied by the agencies being evaluated, in spite of the large number of eligible farm workers who, by the programs' own admission, were never contacted.[63]

The early years of the 1970's have seen dissolution of OEO, the cessation of activity by the Senate Subcommittee on Migratory Labor, and general reduction of emphasis on categorical social service programs within the federal government as revenue sharing and state and local programming expand. USDA continues to report declining migration, without publishing any hard evidence that unskilled farm workers are being absorbed into other types of employment. Land grant colleges continue to

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60 U.S., Comptroller General, op. cit., pp. 1-5.

61 C.f. footnotes 1 and 6.

62 C.f. "Related Literature and Research" and "Sample of Agricultural Workers' Families" for a discussion of methodological problems facing past and current survey research.

USDA representatives explained to the Project Director that cross-tabulation of Census data, or revision of USDA's work force data collection design for the Current Population Survey, in order to collect data on migratory and seasonal farm workers as described here, lacks sufficient priority to justify the expense.

A representative of HEW's Assistant Secretary for Program Planning and Evaluation, (ASPPE) concerned with HEW migrant program evaluation through sample surveys, discounted the importance of actual random sampling to obtain statistically significant data with a known degree of confidence for planning and evaluation purposes. ASPPE chose quasi-probabalistic approaches instead.

HEW SRS/R&D and RSA, through project liaison, appear more concerned with program planning for disabled migrants, than with establishing a planning data base with a known degree of confidence.

63 U.S., Comptroller General, op. cit.; and government sources interviewed by the Project Director, listed in footnote 37.

develop new mechanical and horticultural technology which reduce jobs for unskilled seasonal workers.[64] And certain legislative reforms recommended for years in the areas of the National Labor Relations Act, Migrant Health, nutrition, Rural Housing, Rural Legal Aid, the Fair Labor Standards Act, wage payment and collection protection, the Immigration and Nationality Act, the Elementary and Secondary Education Act, manpower development and training, Farm Labor Contractor Registration, Social Security, Workman's Compensation, and sound research on the effectiveness of OEO and other programs designed to benefit migrants, all remain partially or wholly ignored by Congress.[65]

It is against this background that RSA has proposed to rehabilitate disabled migratory and seasonal farm workers, to enable them to become productive and self-sufficient citizens.

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64 Federal policy has been characterized by some as being more concerned with the efficiency of production by major agricultural corporations, than with the welfare of agricultural workers displaced by new technology. For a critical description of federal policy toward agricultural research, see Jim Hightower, Hard Tomatoes, Hard Times: The Failure of the Land Grant College Complex, Preliminary Report of the Task Force on the Land Grant College Complex (Washington, D.C.: Agribusiness Accountability Project, 1972), pp. 113-149.

65 U.S., Senate, Report. . ., pp. 19-112, presents a comprehensive, although somewhat outdated, summary of "Legislative Accomplishments and Continuing Needs."